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Article

(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs

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Abstract: In this research, new setting is introduced for new SuperHyperNotions, namely, an 1-failed SuperHyperForcing and Neutrosophic 1-failed SuperHyperForcing. Assume a SuperHyperGraph. Then an "1-failed SuperHyperForcing" $\mathcal{Z}(NSHG)$ for a neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex. The additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex; a "neutrosophic 1-failed SuperHyperForcing" $\mathcal{Z}_n(NSHG)$ for a neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum neutrosophic cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex. The additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. Assume a SuperHyperGraph. Then an "$\delta-$1-failed SuperHyperForcing" is a <u>maximal</u> 1-failed SuperHyperForcing of SuperHyperVertices with <u>maximum</u> cardinality such that either of the following expressions hold for the (neutrosophic) cardinalities of SuperHyperNeighbors of $s \in S$: $|S \cap N(s)| > |S \cap (V \setminus N(s))| + \delta$, $|S \cap N(s)| < |S \cap (V \setminus N(s))| + \delta$. The first Expression, holds if S is an "$\delta-$SuperHyperOffensive". And the second Expression, holds if S is an "$\delta-$SuperHyperDefensive"; a"neutrosophic $\delta-$1-failed SuperHyperForcing" is a <u>maximal</u> neutrosophic 1-failed SuperHyperForcing of SuperHyperVertices with <u>maximum</u> neutrosophic cardinality such that either of the following expressions hold for the neutrosophic cardinalities of SuperHyperNeighbors of $s \in S$: $|S \cap N(s)|_{neutrosophic} > |S \cap (V \setminus N(s))|_{neutrosophic} + \delta$, $|S \cap N(s)|_{neutrosophic} < |S \cap (V \setminus N(s))|_{neutrosophic} + \delta$. The first Expression, holds if S is a "neutrosophic $\delta-$SuperHyperOffensive". And the second Expression, holds if S is a "neutrosophic $\delta-$SuperHyperDefensive". A basic familiarity with SuperHyperGraph theory and neutrosophic SuperHyperGraph theory are proposed.

Keywords: SuperHyperGraph; (Neutrosophic) 1-failed SuperHyperForcing; Cancer's Recognitions

AMS Subject Classification: 05C17, 05C22, 05E45

1. Background

Fuzzy set in Ref. [39] by Zadeh (1965), intuitionistic fuzzy sets in Ref. [22] by Atanassov (1986), a first step to a theory of the intuitionistic fuzzy graphs in Ref. [36] by Shannon and Atanassov (1994), a unifying field in logics neutrosophy: neutrosophic probability, set and logic, rehoboth in Ref. [37] by Smarandache (1998), single-valued neutrosophic sets in Ref. [38] by Wang et al. (2010), single-valued neutrosophic graphs in Ref. [26] by Broumi et al. (2016), operations on single-valued neutrosophic graphs in Ref. [18] by Akram and Shahzadi (2017), neutrosophic soft graphs in Ref. [35] by Shah and Hussain (2016), bounds on the average and minimum attendance

in preference-based activity scheduling in Ref. [20] by Aronshtam and Ilani (2022), investigating the recoverable robust single machine scheduling problem under interval uncertainty in Ref. [25] by Bold and Goerigk (2022), polyhedra associated with locating-dominating, open locating-dominating and locating total-dominating sets in graphs in Ref. [19] by G. Argiroffo et al. (2022), a Vizing-type result for semi-total domination in Ref. [21] by J. Asplund et al. (2020), total domination cover rubbling in Ref. [23] by R.A. Beeler et al. (2020), on the global total k-domination number of graphs in Ref. [24] by S. Bermudo et al. (2019), maker–breaker total domination game in Ref. [27] by V. Gledel et al. (2020), a new upper bound on the total domination number in graphs with minimum degree six in Ref. [28] by M.A. Henning, and A. Yeo (2021), effect of predomination and vertex removal on the game total domination number of a graph in Ref. [33] by V. Irsic (2019), hardness results of global total k-domination problem in graphs in Ref. [34] by B.S. Panda, and P. Goyal (2021), are studied.
Look at [1–3,13–17] for further researches on this topic.

2. Extreme Failed SuperHyperForcing

Definition 1. ((neutrosophic)$\delta-$ 1-failed SuperHyperForcing).
Assume a SuperHyperGraph. Then

(i) an **1-failed SuperHyperForcing** $\mathcal{Z}(NSHG)$ for a neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex;

(ii) a **neutrosophic 1-failed SuperHyperForcing** $\mathcal{Z}_n(NSHG)$ for a neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum neutrosophic cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ is turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex.

Definition 2. ((neutrosophic)$\delta-$ 1-failed SuperHyperForcing).
Assume a SuperHyperGraph. Then

(i) an $\delta-$**1-failed SuperHyperForcing** is a <u>maximal</u> 1-failed SuperHyperForcing of SuperHyperVertices with a <u>maximum</u> cardinality such that either of the following expressions hold for the (neutrosophic) cardinalities of SuperHyperNeighbors of $s \in S$:

$$|S \cap N(s)| > |S \cap (V \setminus N(s))| + \delta; \tag{2.1}$$
$$|S \cap N(s)| < |S \cap (V \setminus N(s))| + \delta. \tag{2.2}$$

The Expression (2.1), holds if S is an $\delta-$**SuperHyperOffensive**. And the Expression (2.2), holds if S is an $\delta-$**SuperHyperDefensive**;

(ii) a **neutrosophic** $\delta-$**1-failed SuperHyperForcing** is a <u>maximal</u> neutrosophic 1-failed SuperHyperForcing of SuperHyperVertices with <u>maximum</u> neutrosophic cardinality such that either of the following expressions hold for the neutrosophic cardinalities of SuperHyperNeighbors of $s \in S$:

$$|S \cap N(s)|_{neutrosophic} > |S \cap (V \setminus N(s))|_{neutrosophic} + \delta; \tag{2.3}$$
$$|S \cap N(s)|_{neutrosophic} < |S \cap (V \setminus N(s))|_{neutrosophic} + \delta. \tag{2.4}$$

The Expression (2.3), holds if S is a **neutrosophic $\delta-$SuperHyperOffensive**. And the Expression (2.4), holds if S is a **neutrosophic $\delta-$SuperHyperDefensive**.

Example 3. Assume the SuperHyperGraphs in the Figures (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15), (16), (17), (18), (19), and (20).

- On the Figure (1), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. E_1 and E_3 are some empty SuperHyperEdges but E_2 is a loop SuperHyperEdge and E_4 is an SuperHyperEdge. Thus in the terms of SuperHyperNeighbor, there's only one SuperHyperEdge, namely, E_4. The SuperHyperVertex, V_3 is isolated means that there's no SuperHyperEdge has it as an endpoint. Thus SuperHyperVertex, V_3, is contained in every given 1-failed SuperHyperForcing. All the following SuperHyperSets of SuperHyperVertices are the simple type-SuperHyperSet of the 1-failed SuperHyperForcing.

$$\{V_3, V_1\}$$
$$\{V_3, V_2\}$$
$$\{V_3, V_4\}$$

The SuperHyperSets of SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSets of the SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **aren't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSets of SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, don't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **aren't** up. To sum them up, the SuperHyperSets of SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, **aren't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSets of the SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s** **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSets, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$. Thus the non-obvious

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1-failed SuperHyperForcing, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, aren't up. The obvious simple type-SuperHyperSets of the 1-failed SuperHyperForcing, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are a SuperHyperSets, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. It's interesting to mention that the only obvious simple type-SuperHyperSets of the neutrosophic 1-failed SuperHyperForcing amid those obvious simple type-SuperHyperSets of the 1-failed SuperHyperForcing, is only $\{V_3, V_2\}$.

- On the Figure (2), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. E_1, E_2 and E_3 are some empty SuperHyperEdges but E_4 is an SuperHyperEdge. Thus in the terms of SuperHyperNeighbor, there's only one SuperHyperEdge, namely, E_4. The SuperHyperVertex, V_3 is isolated means that there's no SuperHyperEdge has it as an endpoint. Thus SuperHyperVertex, V_3, is contained in every given 1-failed SuperHyperForcing. All the following SuperHyperSets of SuperHyperVertices are the simple type-SuperHyperSet of the 1-failed SuperHyperForcing.

$$\{V_3, V_1\}$$
$$\{V_3, V_2\}$$
$$\{V_3, V_4\}$$

The SuperHyperSets of SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSets of the SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **aren't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSets of SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, don't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **aren't** up. To sum them up, the SuperHyperSets of SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, **aren't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSets of the SuperHyperVertices, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s** **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices

outside the intended SuperHyperSets, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, aren't up. The obvious simple type-SuperHyperSets of the 1-failed SuperHyperForcing, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, are a SuperHyperSets, $\{V_3, V_1\}, \{V_3, V_2\}, \{V_3, V_4\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. It's interesting to mention that the only obvious simple type-SuperHyperSets of the neutrosophic 1-failed SuperHyperForcing amid those obvious simple type-SuperHyperSets of the 1-failed SuperHyperForcing, is only $\{V_3, V_2\}$.

- On the Figure (3), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. E_1, E_2 and E_3 are some empty SuperHyperEdges but E_4 is an SuperHyperEdge. Thus in the terms of SuperHyperNeighbor, there's only one SuperHyperEdge, namely, E_4. The SuperHyperSets of SuperHyperVertices, $\{V_1\}, \{V_2\}, \{V_3\}$, are the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSets of the SuperHyperVertices, $\{V_1\}, \{V_2\}, \{V_3\}$, are **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **aren't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSets of SuperHyperVertices, $\{V_1\}, \{V_2\}, \{V_3\}$, don't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **aren't** up. To sum them up, the SuperHyperSets of SuperHyperVertices, $\{V_1\}, \{V_2\}, \{V_3\}$, **aren't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSets of the SuperHyperVertices, $\{V_1\}, \{V_2\}, \{V_3\}$, are the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since they'**ve** **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSets, $\{V_1\}, \{V_2\}, \{V_3\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_1\}, \{V_2\}, \{V_3\}$, aren't up. The obvious simple type-SuperHyperSets of the 1-failed SuperHyperForcing, $\{V_1\}, \{V_2\}, \{V_3\}$, are the SuperHyperSets, $\{V_1\}, \{V_2\}, \{V_3\}$, don't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. It's interesting to mention that the only obvious simple type-SuperHyperSets of the neutrosophic 1-failed SuperHyperForcing amid those obvious simple type-SuperHyperSets of the 1-failed SuperHyperForcing, is only $\{V_1\}$.
- On the Figure (4), the SuperHyperNotion, namely, an 1-failed SuperHyperForcing, is up. There's no empty SuperHyperEdge but E_3 are a loop SuperHyperEdge on $\{F\}$, and there are some SuperHyperEdges, namely, E_1 on $\{H, V_1, V_3\}$, alongside E_2 on $\{O, H, V_4, V_3\}$ and

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E_4, E_5 on $\{N, V_1, V_2, V_3, F\}$. The SuperHyperSet of SuperHyperVertices, $\{V_1, V_2, V_3, V_4, O, H\}$, is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices, $\{V_1, V_2, V_3, V_4, O, H\}$, is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices, $\{V_1, V_2, V_3, V_4, O, H\}$, doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices, $\{V_1, V_2, V_3, V_4, O, H\}$, **isn't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices, $\{V_1, V_2, V_3, V_4, O, H\}$, is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet, $\{V_1, V_2, V_3, V_4, O, H\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_1, V_2, V_3, V_4, O, H\}$, isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $\{V_1, V_2, V_3, V_4, O, H\}$, is a SuperHyperSet, $\{V_1, V_2, V_3, V_4, O, H\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.

- On the Figure (5), the SuperHyperNotion, namely, SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

is a SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ is mentioned as the SuperHyperModel $NSHG : (V, E)$ in the Figure (5).

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- On the Figure (6), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

is a SuperHyperSet,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ with a illustrated SuperHyperModeling of the Figure (6).

- On the Figure (7), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is

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the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is a SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ of depicted SuperHyperModel as the Figure (7).

- On the Figure (8), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is a SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ of dense SuperHyperModel as the Figure (8).

- On the Figure (9), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

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is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

is a SuperHyperSet,

$$\{V_2, V_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{22}\},$$

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doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ with a messy SuperHyperModeling of the Figure (9).

- On the Figure (10), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only

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once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

is a SuperHyperSet,

$$\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ of highly-embedding-connected SuperHyperModel as the Figure (10).

- On the Figure (11), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, **isn't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s** **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet, $\{V_2, V_4, V_5, V_6\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_2, V_4, V_5, V_6\}$, isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $\{V_2, V_4, V_5, V_6\}$, is a SuperHyperSet, $\{V_2, V_4, V_5, V_6\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.

- On the Figure (12), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, **isn't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s** **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, is a SuperHyperSet, $\{V_2, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ in highly-multiple-connected-style SuperHyperModel On the Figure (12).
- On the Figure (13), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black

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after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, **isn't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices, $\{V_2, V_4, V_5, V_6\}$, is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet, $\{V_2, V_4, V_5, V_6\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_2, V_4, V_5, V_6\}$, isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $\{V_2, V_4, V_5, V_6\}$, is a SuperHyperSet, $\{V_2, V_4, V_5, V_6\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.

- On the Figure (14), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices, $\{V_2\}$, is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices, $\{V_2\}$, is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices, $\{V_2\}$, doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices, $\{V_2\}$, **isn't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices, $\{V_2\}$, is the SuperHyperSet Ss of black SuperHyperVertices (whereas

SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s** **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet, $\{V_2\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_2\}$, isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $\{V_2\}$, is a SuperHyperSet, $\{V_2\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.

- On the Figure (15), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices, $\{V_1, V_4, V_5, V_6\}$, is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices, $\{V_1, V_4, V_5, V_6\}$, is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices, $\{V_1, V_4, V_5, V_6\}$, doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices, $\{V_1, V_4, V_5, V_6\}$, **isn't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices, $\{V_1, V_4, V_5, V_6\}$, is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s** **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet, $\{V_1, V_4, V_5, V_6\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_1, V_4, V_5, V_6\}$, isn't up. The obvious simple

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type-SuperHyperSet of the 1-failed SuperHyperForcing, $\{V_1, V_4, V_5, V_6\}$, is a SuperHyperSet, $\{V_1, V_4, V_5, V_6\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. as Linearly-Connected SuperHyperModel On the Figure (15).

- On the Figure (16), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**.

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Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

is a SuperHyperSet,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.

- On the Figure (17), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to

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SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\}.$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

is a SuperHyperSet,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18}, V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

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doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$ as Lnearly-over-packed SuperHyperModel is featured On the Figure (17).

- On the Figure (18), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices, $\{V_2, R, M_6, L_6, F, P, J, M\}$, is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices, $\{V_2, R, M_6, L_6, F, P, J, M\}$, is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices, $\{V_2, R, M_6, L_6, F, P, J, M\}$, doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices, $\{V_2, R, M_6, L_6, F, P, J, M\}$, **isn't** the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices, $\{V_2, R, M_6, L_6, F, P, J, M\}$, is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet, $\{V_2, R, M_6, L_6, F, P, J, M\}$. Thus the non-obvious 1-failed SuperHyperForcing, $\{V_2, R, M_6, L_6, F, P, J, M\}$, isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $\{V_2, R, M_6, L_6, F, P, J, M\}$, is a SuperHyperSet, $\{V_2, R, M_6, L_6, F, P, J, M\}$, doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.
- On the Figure (19), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\}.$$

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Thus the non-obvious 1-failed SuperHyperForcing,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

is a SuperHyperSet,

$$\{T_3, S_3, U_3, V_4, V_5, V_6, V_7, V_8, V_9, V_{10}, R_6, S_6, Z_5, W_5, T_6$$
$$H_6, O_6, E_6, C_6, V_2, R, M_6, L_6, F, P, J, M\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.

- On the Figure (20), the SuperHyperNotion, namely, 1-failed SuperHyperForcing, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

is the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. The SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

is **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious 1-failed SuperHyperForcing **isn't** up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing is a SuperHyperSet **excludes** only **two** SuperHyperVertices are titled to SuperHyperNeighbors in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. But the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

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doesn't have more than two SuperHyperVertices **outside** the intended SuperHyperSet. Thus the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing **isn't** up. To sum them up, the SuperHyperSet of SuperHyperVertices,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

isn't the non-obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing. Since the SuperHyperSet of the SuperHyperVertices,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

is the SuperHyperSet Ss of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex **and** they are **1-failed SuperHyperForcing**. Since it'**s the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. There aren't only more than two SuperHyperVertices **outside** the intended SuperHyperSet,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

Thus the non-obvious 1-failed SuperHyperForcing,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

isn't up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

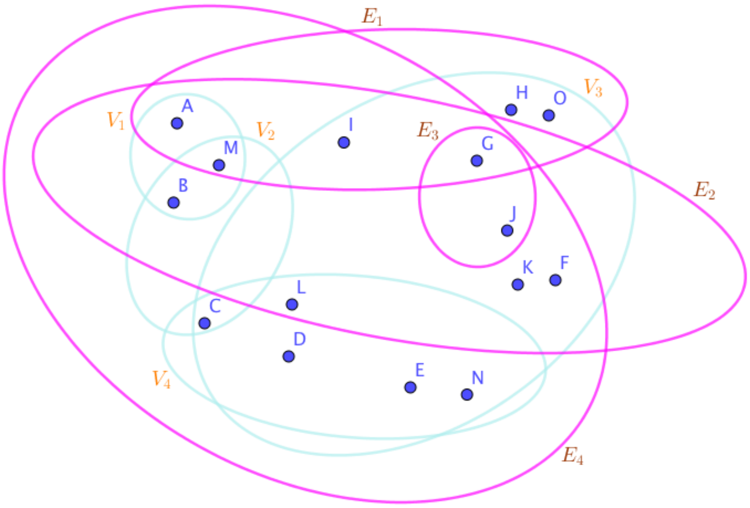

Figure 1. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

is a SuperHyperSet,

$$\{V_2, V_3, V_4, T_6, U_6, H_7, V_5, R_9,$$
$$V_6, V_7, V_8, V_9, v_8, W_8, U_8, S_8, T_8, C_9, Z_8, S_9$$
$$K_9, O_9, L_9, O_4, V_{10}, P_4, R_4, T_4, S_4\},$$

doesn't exclude only more than two SuperHyperVertices in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$.

Proposition 4. *Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. Then in the worst case, literally, $V \setminus \{x, z\}$ is an 1-failed SuperHyperForcing. In other words, the most cardinality, the upper sharp bound for cardinality, of 1-failed SuperHyperForcing is the cardinality of $V \setminus \{x, z\}$.*

Proof. Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once

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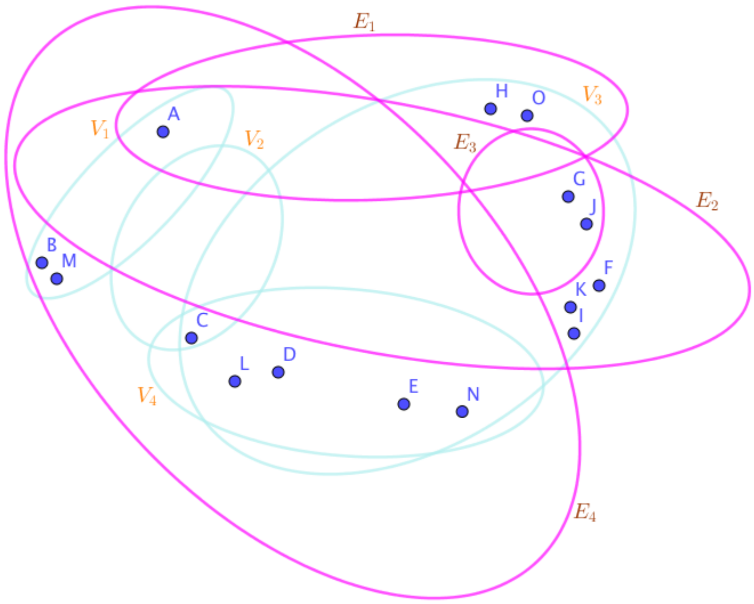

Figure 2. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

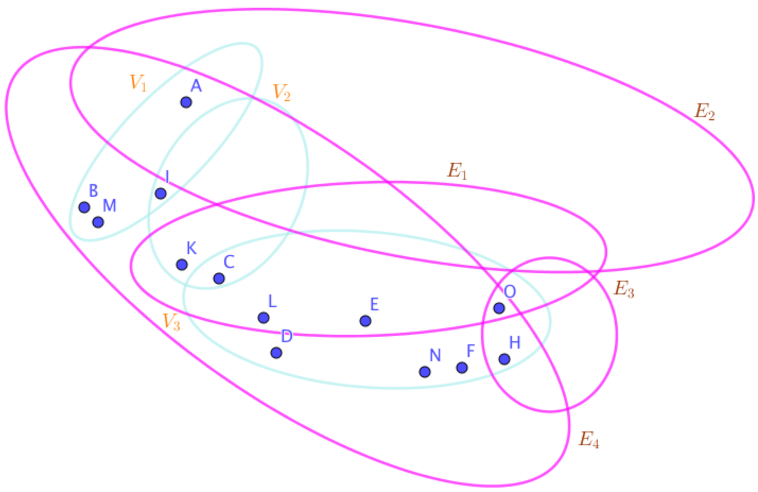

Figure 3. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

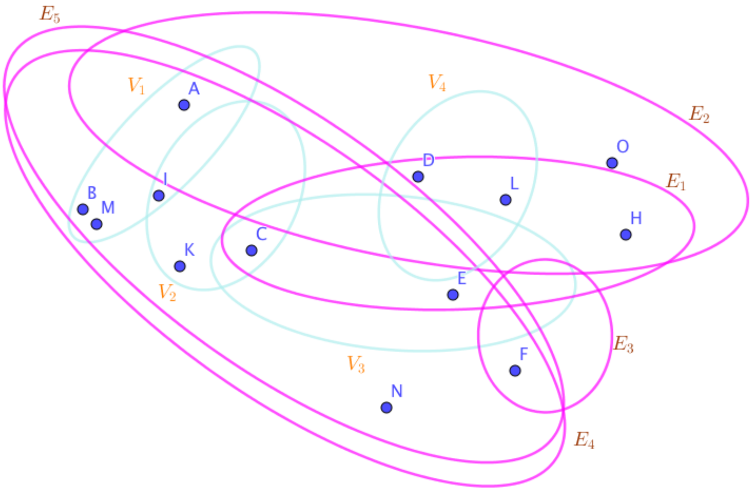

Figure 4. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

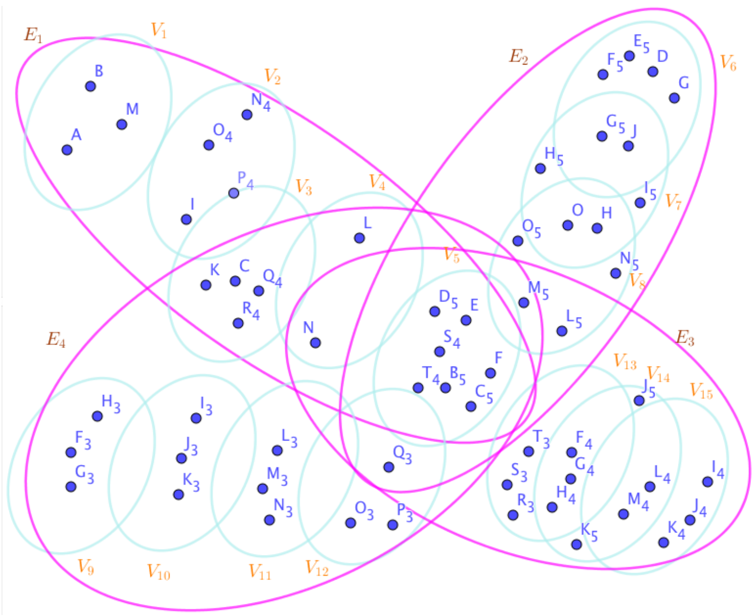

Figure 5. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

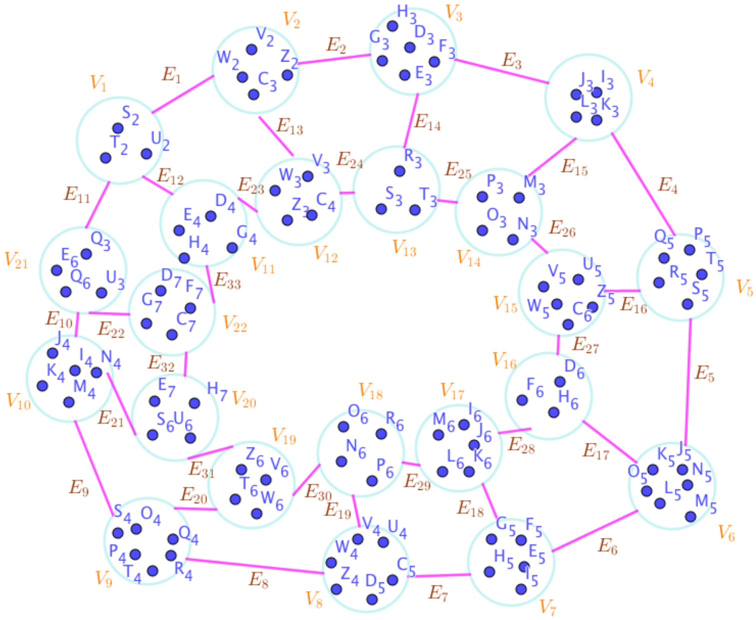

Figure 6. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

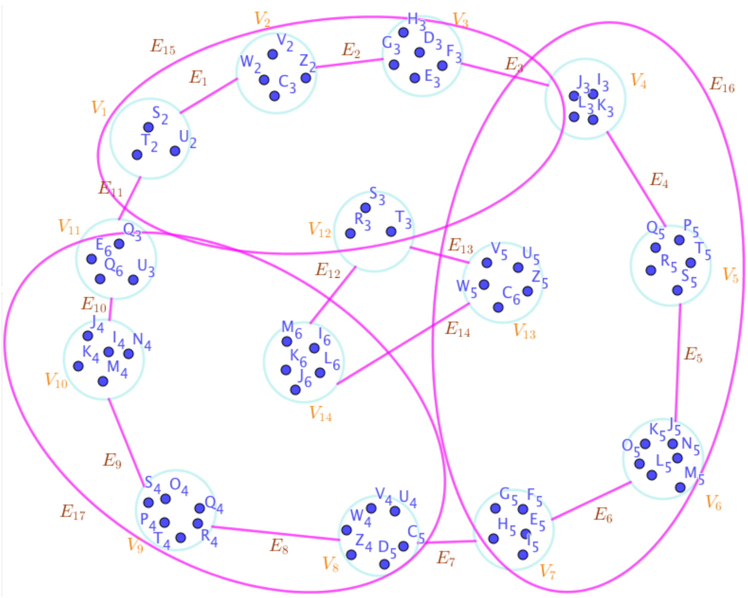

Figure 7. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

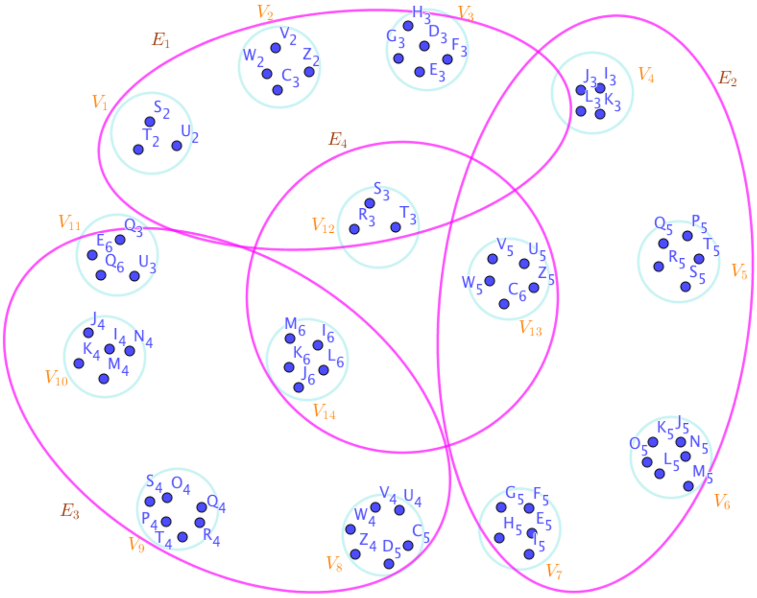

Figure 8. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

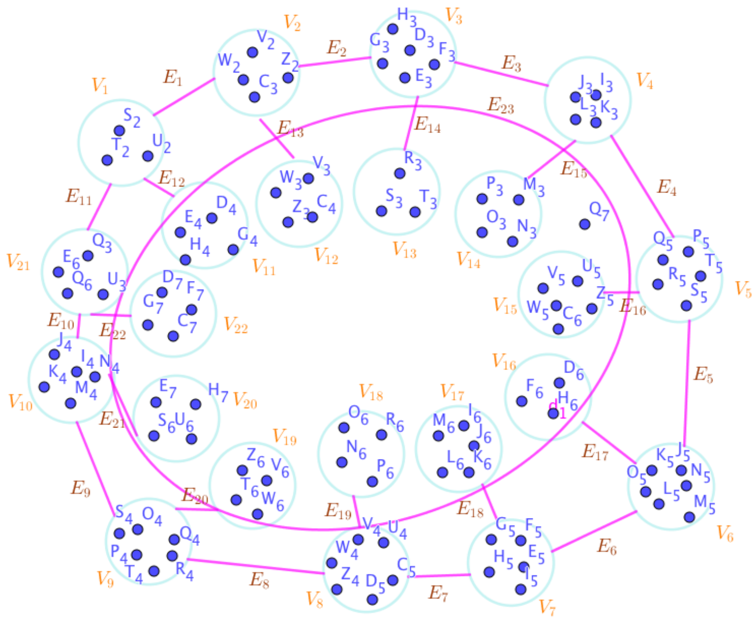

Figure 9. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

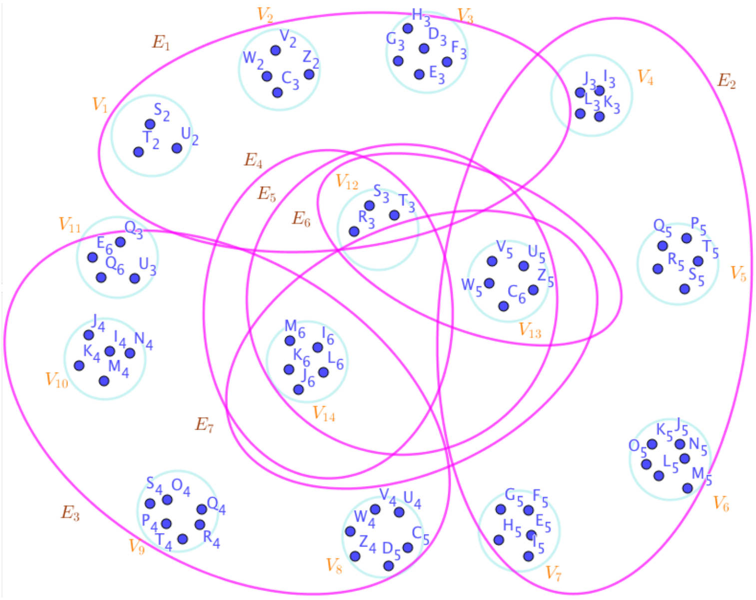

Figure 10. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

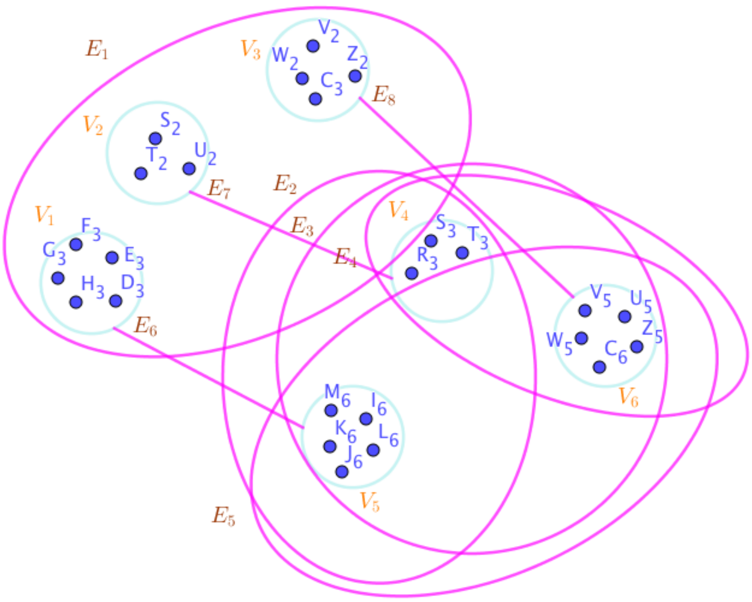

Figure 11. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

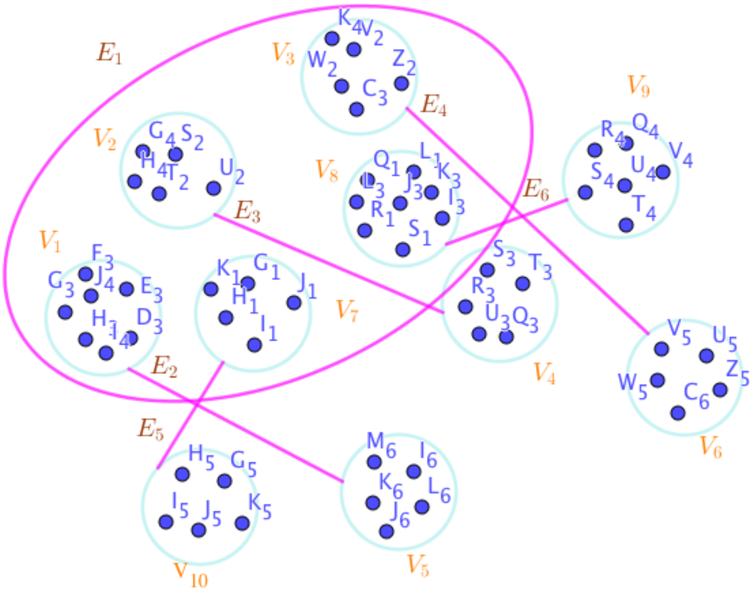

Figure 12. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

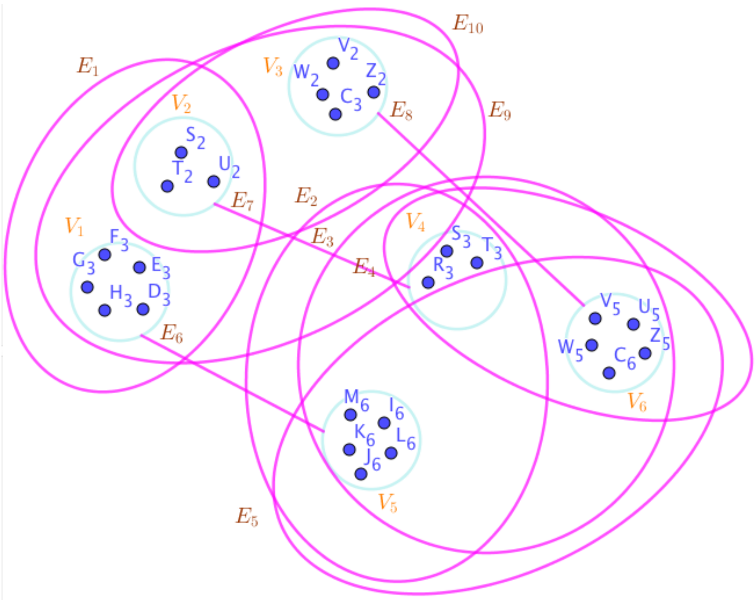

Figure 13. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

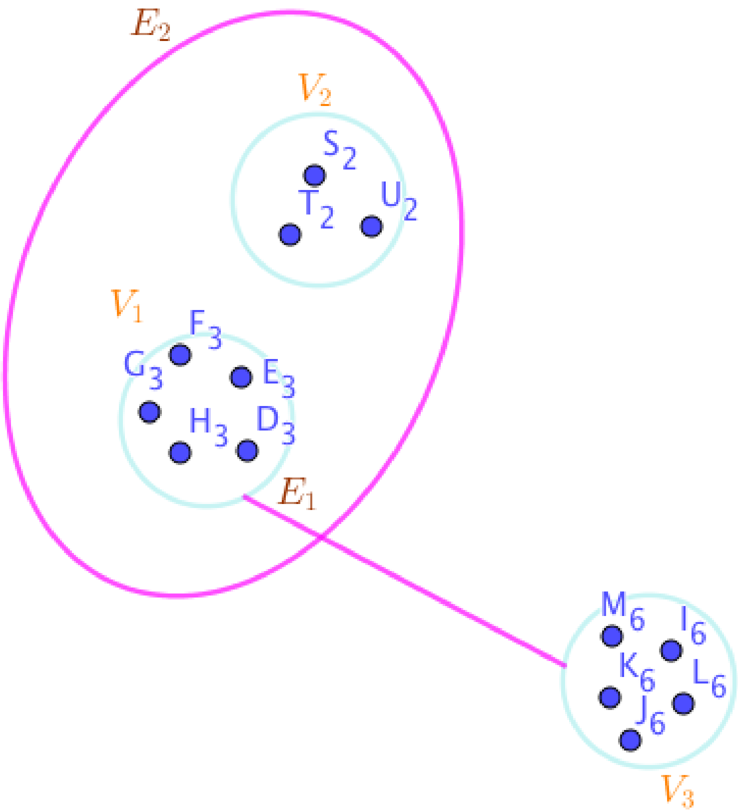

Figure 14. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

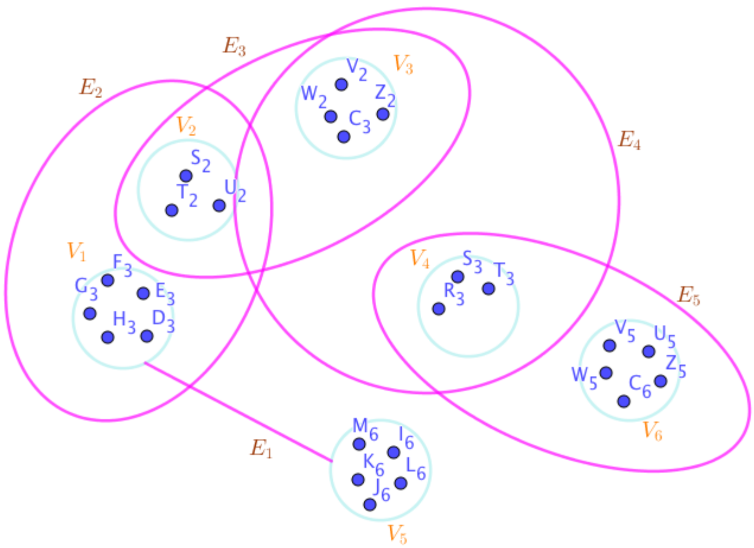

Figure 15. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

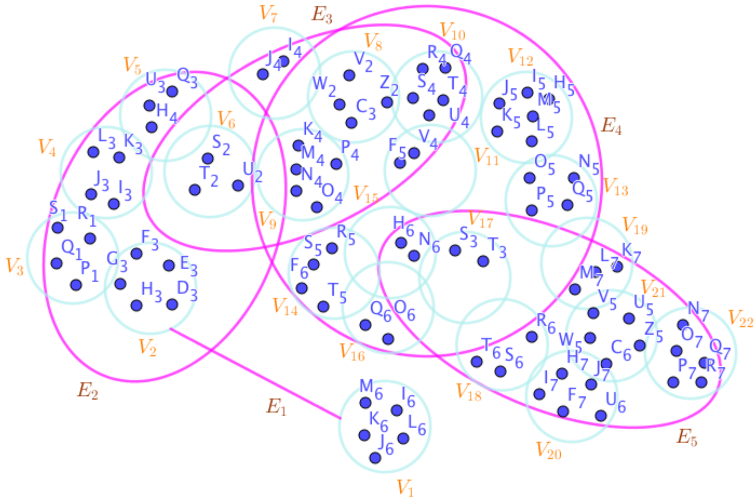

Figure 16. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

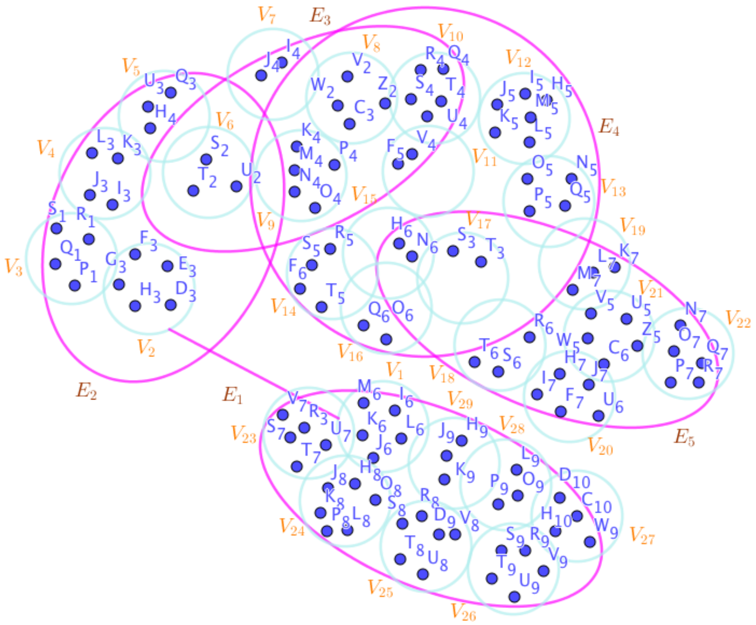

Figure 17. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

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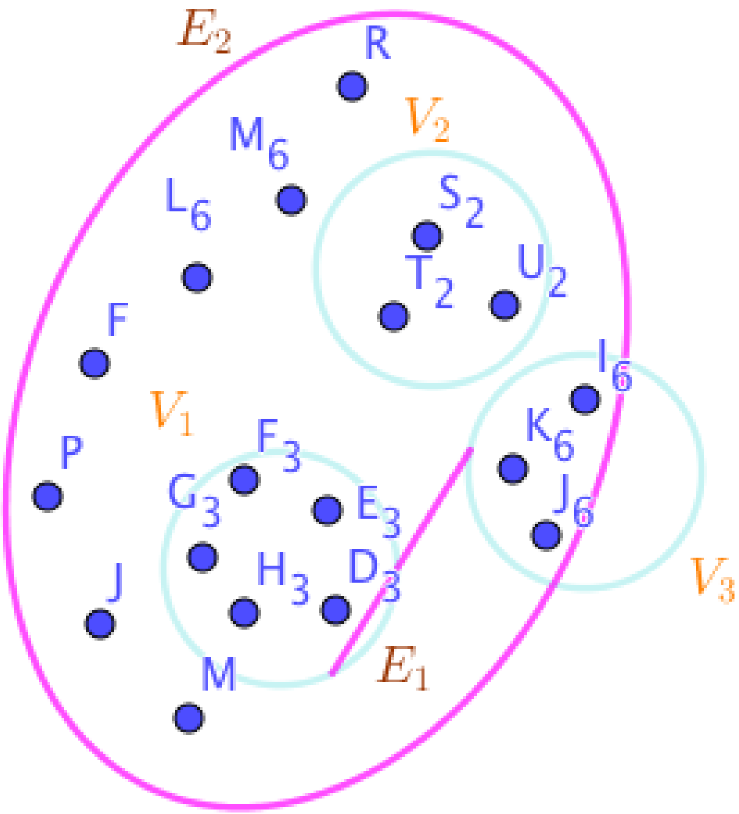

Figure 18. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

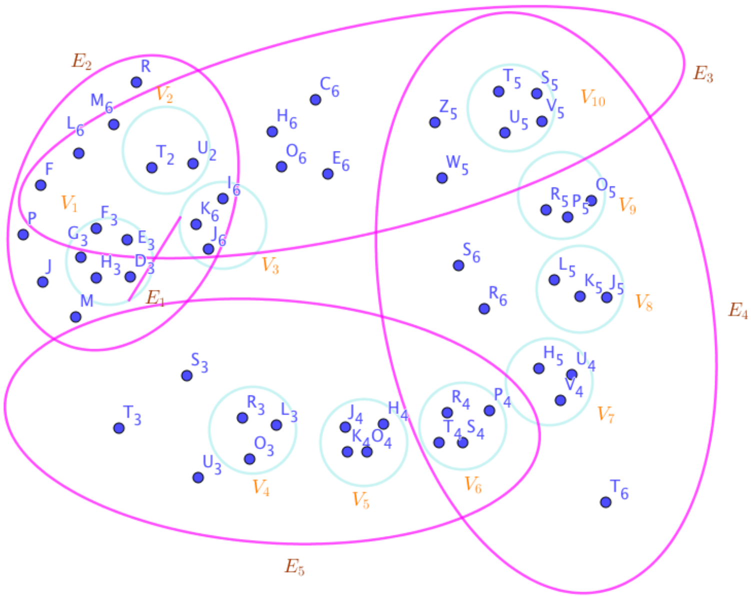

Figure 19. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

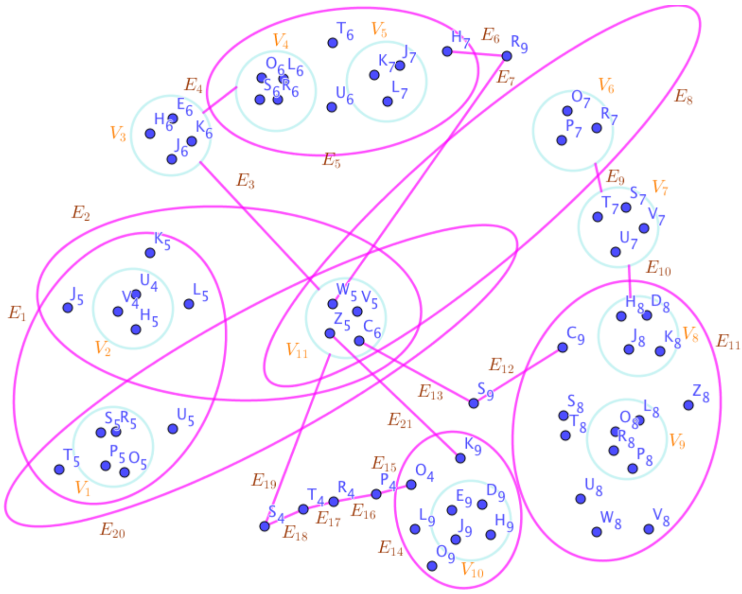

Figure 20. The SuperHyperGraphs Associated to the Notions of 1-failed SuperHyperForcing in the Example (3).

to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. □

Proposition 5. *Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. Then the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality.*

Proof. Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. □

Proposition 6. *Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. If a SuperHyperEdge has z SuperHyperVertices, then $z - 2$ number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing.*

Proof. Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. Let a SuperHyperEdge has z SuperHyperVertices. Consider $z - 3$ number of those SuperHyperVertices from that SuperHyperEdge belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum

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cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus all the following SuperHyperSets of SuperHyperVertices are the simple type-SuperHyperSet of the 1-failed SuperHyperForcing. It's the contradiction to the SuperHyperSet either $S = V \setminus \{x, y, z\}$ or $S = V \setminus \{x\}$ is an 1-failed SuperHyperForcing. Thus any given SuperHyperSet of the SuperHyperVertices contains the number of those SuperHyperVertices from that SuperHyperEdge with z SuperHyperVertices less than $z - 2$ isn't an 1-failed SuperHyperForcing. Thus if a SuperHyperEdge has z SuperHyperVertices, then $z - 2$ number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. □

Proposition 7. *Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. There's a SuperHyperEdge has only two distinct SuperHyperVertices outside of an 1-failed SuperHyperForcing. In other words, there's an unique SuperHyperEdge has only two distinct white SuperHyperVertices.*

Proof. Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black

SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, there's a SuperHyperEdge has only two distinct white SuperHyperVertices which are SuperHyperNeighbors. □

Proposition 8. *Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. The all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors.*

Proof. Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas

SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. □

Proposition 9. *Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. The any 1-failed SuperHyperForcing only contains all interior SuperHyperVertices and all exterior SuperHyperVertices where there's any of them has two SuperHyperNeighbors out.*

Proof. Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. Thus in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, any 1-failed SuperHyperForcing only contains all interior SuperHyperVertices and all exterior SuperHyperVertices where there's any of them has two SuperHyperNeighbors out. □

Remark 10. The words "1-failed SuperHyperForcing" and "SuperHyperDominating" refer to the maximum type-style and the minimum type-style. In other words, they refer to both the maximum[minimum] number and the SuperHyperSet with the maximum[minimum] cardinality.

Proposition 11. *Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. An 1-failed SuperHyperForcing contains the SuperHyperDominating.*

Proof. Assume a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$. By applying the Proposition (9), the results are up. Thus in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, an 1-failed SuperHyperForcing contains the SuperHyperDominating. □

3. Results on SuperHyperClasses

Proposition 12. *Assume a connected SuperHyperPath $NSHP : (V, E)$. Then an 1-failed SuperHyperForcing-style with the maximum SuperHyperCardinality is a SuperHyperSet of the exterior SuperHyperVertices.*

Proposition 13. *Assume a connected SuperHyperPath $NSHP : (V, E)$. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only two exceptions in the form of interior SuperHyperVertices from the same SuperHyperEdge. An 1-failed SuperHyperForcing has the number of all the SuperHyperVertices minus two.*

Proof. Assume a connected SuperHyperPath $NSHP : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored

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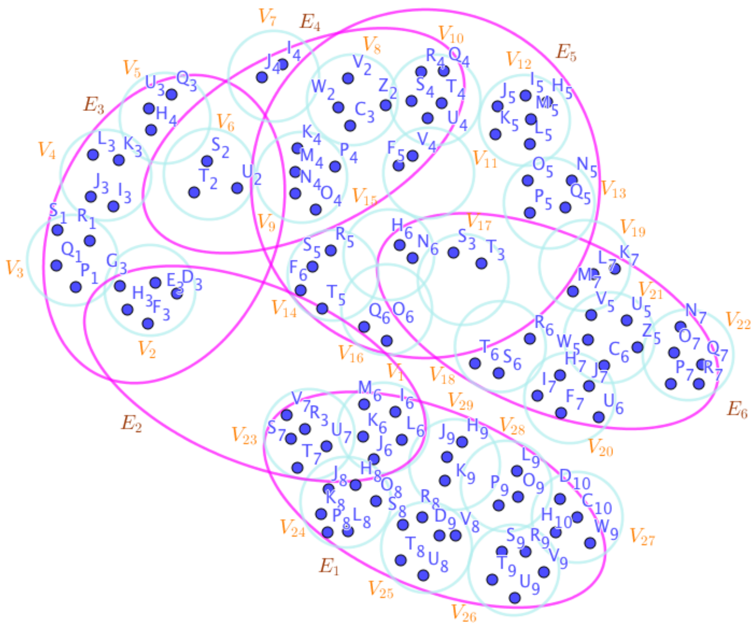

Figure 21. A SuperHyperPath Associated to the Notions of 1-failed SuperHyperForcing in the Example (14).

white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only two exceptions in the form of interior SuperHyperVertices from the same SuperHyperEdge. An 1-failed SuperHyperForcing has the number of all the SuperHyperVertices minus two. □

Example 14. In the Figure (21), the connected SuperHyperPath $NSHP : (V, E)$, is highlighted and featured. The SuperHyperSet,

$$\{V_1, V_2, V_5, V_6, V_7, V_8, V_9, V_{10}, V_{11}, V_{12}, V_{13}, V_{14}, V_{15}, V_{16}, V_{17}, V_{18},$$
$$V_{19}, V_{20}, V_{21}, V_{22}, V_{23}, V_{24}, V_{25}, V_{26}, V_{27}, V_{28}, V_{29}\},$$

of the SuperHyperVertices of the connected SuperHyperPath $NSHP : (V, E)$, in the SuperHyperModel (21), is the 1-failed SuperHyperForcing.

Proposition 15. *Assume a connected SuperHyperCycle $NSHC : (V, E)$. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only two exceptions in the form of interior SuperHyperVertices from the same SuperHyperEdge. An 1-failed SuperHyperForcing has the number of all the SuperHyperVertices minus on the 2 numbers excerpt the same exterior SuperHyperPart.*

Proof. Assume a connected SuperHyperCycle $NSHC : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus,

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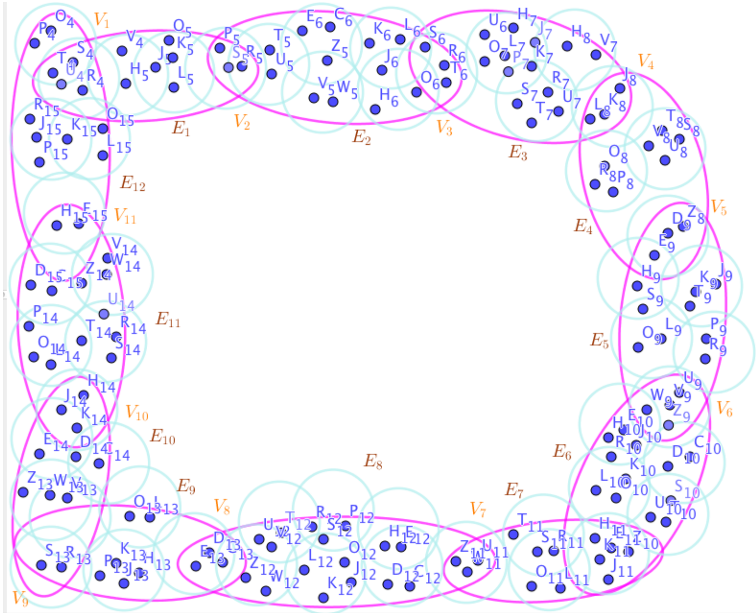

Figure 22. A SuperHyperCycle Associated to the Notions of 1-failed SuperHyperForcing in the Example (16).

in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only two exceptions in the form of interior SuperHyperVertices from the same SuperHyperEdge. An 1-failed SuperHyperForcing has the number of all the SuperHyperVertices minus on the 2 numbers excerpt the same exterior SuperHyperPart. □

Example 16. In the Figure (22), the connected SuperHyperCycle $NSHC : (V, E)$, is highlighted and featured. The obtained SuperHyperSet, by the Algorithm in previous result, of the SuperHyperVertices of the connected SuperHyperCycle $NSHC : (V, E)$, in the SuperHyperModel (22), is the 1-failed SuperHyperForcing.

Proposition 17. *Assume a connected SuperHyperStar $NSHS : (V, E)$. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices, excluding the SuperHyperCenter, with only one exception in the form of interior SuperHyperVertices from any given SuperHyperEdge. An 1-failed SuperHyperForcing has the number of the cardinality of the second SuperHyperPart minus one.*

Proof. Assume a connected SuperHyperStar $NSHS : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices, excluding the SuperHyperCenter, with only one exception in the form of interior SuperHyperVertices from any given SuperHyperEdge. An 1-failed SuperHyperForcing has the number of the cardinality of the second SuperHyperPart minus one. □

Example 18. In the Figure (23), the connected SuperHyperStar $NSHS : (V, E)$, is highlighted and featured. The obtained SuperHyperSet, by the Algorithm in previous result, of the SuperHyperVertices of the connected SuperHyperStar $NSHS : (V, E)$, in the SuperHyperModel (23), is the 1-failed SuperHyperForcing.

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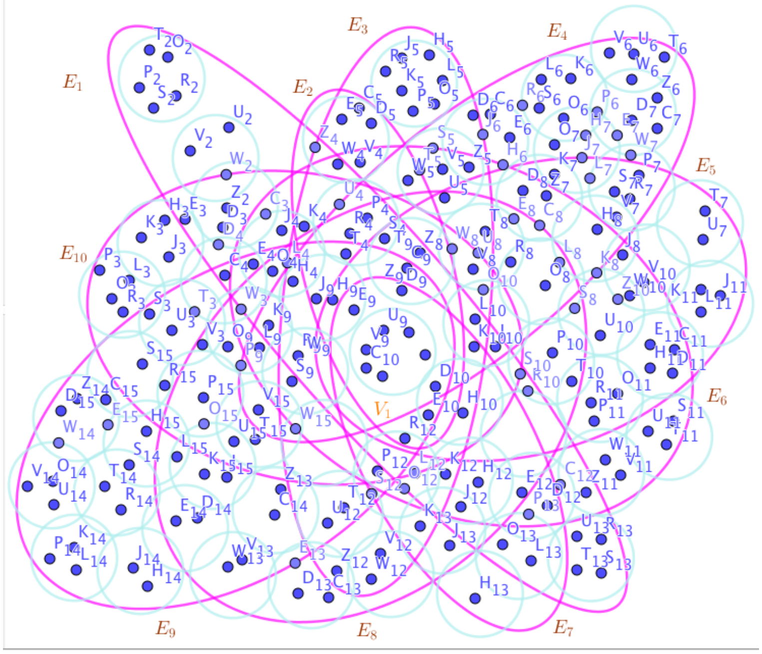

Figure 23. A SuperHyperStar Associated to the Notions of 1-failed SuperHyperForcing in the Example (18).

Proposition 19. *Assume a connected SuperHyperBipartite $NSHB : (V, E)$. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only two exceptions in the form of interior SuperHyperVertices from same SuperHyperEdge. An 1-failed SuperHyperForcing has the number of the cardinality of the first SuperHyperPart minus one plus the second SuperHyperPart minus one.*

Proof. Assume a connected SuperHyperBipartite $NSHB : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex

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only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only two exceptions in the form of interior SuperHyperVertices from same SuperHyperEdge. An 1-failed SuperHyperForcing has the number of the cardinality of the first SuperHyperPart minus one plus the second SuperHyperPart minus one. □

Example 20. In the Figure (24), the connected SuperHyperBipartite $NSHB : (V, E)$, is highlighted and featured. The obtained SuperHyperSet, by the Algorithm in previous result, of the SuperHyperVertices of the connected SuperHyperBipartite $NSHB : (V, E)$, in the SuperHyperModel (24), is the 1-failed SuperHyperForcing.

Proposition 21. *Assume a connected SuperHyperMultipartite $NSHM : (V, E)$. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only one exception in the form of interior SuperHyperVertices from a SuperHyperPart and only one exception in the form of interior SuperHyperVertices from another SuperHyperPart. An 1-failed SuperHyperForcing has the number of all the summation on the cardinality of the all SuperHyperParts minus two excerpt distinct SuperHyperParts.*

Proof. Assume a connected SuperHyperMultipartite $NSHM : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x, y, z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the

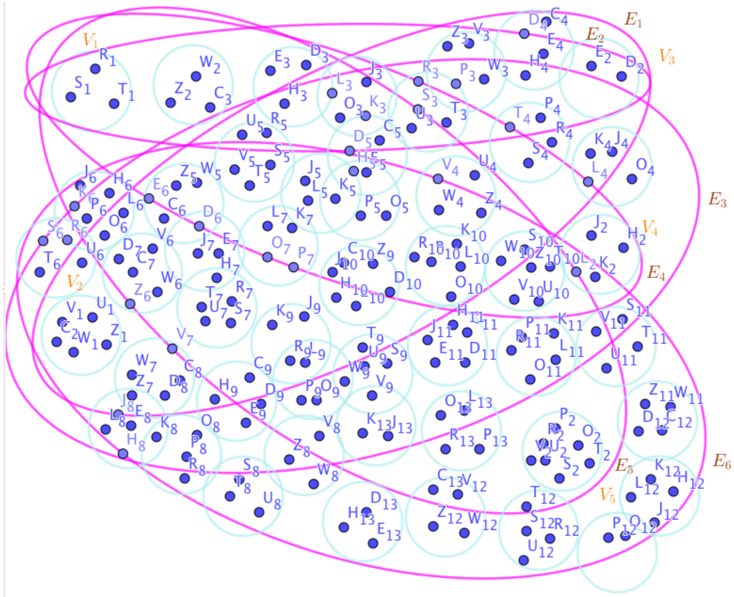

Figure 24. A SuperHyperBipartite Associated to the Notions of 1-failed SuperHyperForcing in the Example (20).

color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x, z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x, z\}$, **is** a SuperHyperSet, $V \setminus \{x, z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V, E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x, z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to

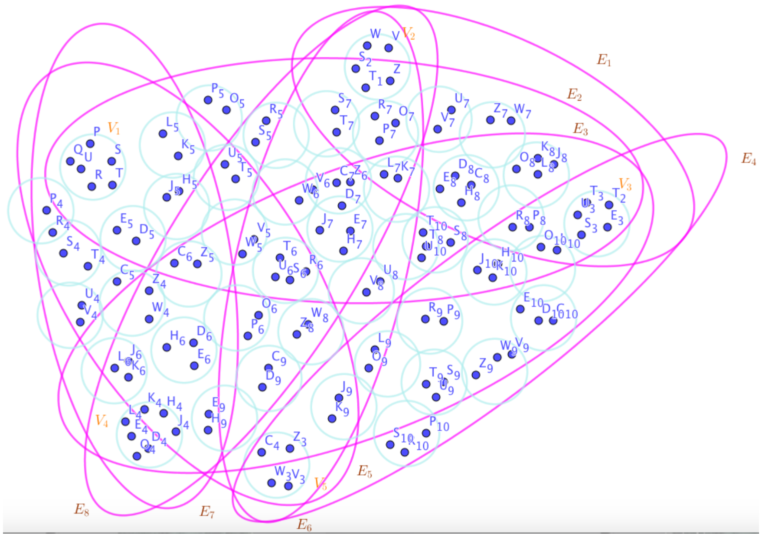

Figure 25. A SuperHyperMultipartite Associated to the Notions of 1-failed SuperHyperForcing in the Example (22).

be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V|-2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x, z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V, E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices with only one exception in the form of interior SuperHyperVertices from a SuperHyperPart and only one exception in the form of interior SuperHyperVertices from another SuperHyperPart. An 1-failed SuperHyperForcing has the number of all the summation on the cardinality of the all SuperHyperParts minus two excerpt distinct SuperHyperParts. □

Example 22. In the Figure (25), the connected SuperHyperMultipartite $NSHM : (V, E)$, is highlighted and featured. The obtained SuperHyperSet, by the Algorithm in previous result, of the SuperHyperVertices of the connected SuperHyperMultipartite $NSHM : (V, E)$, in the SuperHyperModel (25), is the 1-failed SuperHyperForcing.

Proposition 23. *Assume a connected SuperHyperWheel $NSHW : (V, E)$. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices, excluding the SuperHyperCenter, with only one exception in the form of interior SuperHyperVertices from any given SuperHyperEdge. An 1-failed SuperHyperForcing has the number of all the number of all the SuperHyperEdges minus two numbers excerpt two SuperHyperNeighbors.*

Proof. Assume a connected SuperHyperWheel $NSHW : (V, E)$. Let a SuperHyperEdge has some SuperHyperVertices. Consider some numbers of those SuperHyperVertices from that SuperHyperEdge excluding three distinct SuperHyperVertices, belong to any given SuperHyperSet of the SuperHyperVertices. Consider there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x,y,z\}$ is a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex but it isn't an 1-failed SuperHyperForcing. Since it doesn't have **the maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. The SuperHyperSet of the SuperHyperVertices $V \setminus \{x\}$ is the maximum cardinality of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) but it isn't an 1-failed SuperHyperForcing. Since it **doesn't do** the procedure such that $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex [there's at least one white without any white SuperHyperNeighbor outside implying there's, by the connectedness of the connected neutrosophic SuperHyperGraph $NSHG : (V,E)$, a SuperHyperVertex, titled its SuperHyperNeighbor, to the SuperHyperSet S does the "the color-change rule".]. There're only **two** SuperHyperVertices **outside** the intended SuperHyperSet, $V \setminus \{x,z\}$. Thus the obvious 1-failed SuperHyperForcing, $V \setminus \{x,z\}$, is up. The obvious simple type-SuperHyperSet of the 1-failed SuperHyperForcing, $V \setminus \{x,z\}$, **is** a SuperHyperSet, $V \setminus \{x,z\}$, **excludes** only **two** SuperHyperVertices are titled in a connected neutrosophic SuperHyperNeighbors SuperHyperGraph $NSHG : (V,E)$. Since the SuperHyperSet of the SuperHyperVertices $V \setminus \{x,z\}$ is the **maximum cardinality** of a SuperHyperSet S of black SuperHyperVertices (whereas SuperHyperVertices in $V(G) \setminus S$ are colored white) **such that** $V(G)$ isn't turned black after finitely many applications of "the color-change rule": a white SuperHyperVertex is converted to a black SuperHyperVertex if it is the only white SuperHyperNeighbor of a black SuperHyperVertex with the additional condition is referred by "1-" about the usage of any black SuperHyperVertex only once to act on white SuperHyperVertex to be black SuperHyperVertex. It implies that extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is $|V| - 2$. Thus it induces that the extreme number of 1-failed SuperHyperForcing has, the most cardinality, the upper sharp bound for cardinality, is the extreme cardinality of $V \setminus \{x,z\}$ if there's an 1-failed SuperHyperForcing with the most cardinality, the upper sharp bound for cardinality. Thus if a SuperHyperEdge has some SuperHyperVertices, then, with excluding two distinct SuperHyperVertices, the all number of those SuperHyperVertices from that SuperHyperEdge belong to any 1-failed SuperHyperForcing. Thus, in a connected neutrosophic SuperHyperGraph $NSHG : (V,E)$, there's a SuperHyperEdge has only two distinct SuperHyperVertices outside of 1-failed SuperHyperForcing. In other words, here's a SuperHyperEdge has only two distinct white SuperHyperVertices. In a connected neutrosophic SuperHyperGraph $NSHG : (V,E)$, the all exterior SuperHyperVertices belong to any 1-failed SuperHyperForcing if there's one of them such that there are only two interior SuperHyperVertices are mutually SuperHyperNeighbors. Then an 1-failed SuperHyperForcing is a SuperHyperSet of the exterior SuperHyperVertices and the interior SuperHyperVertices, excluding the SuperHyperCenter, with only one exception in the form of interior SuperHyperVertices from any given SuperHyperEdge.

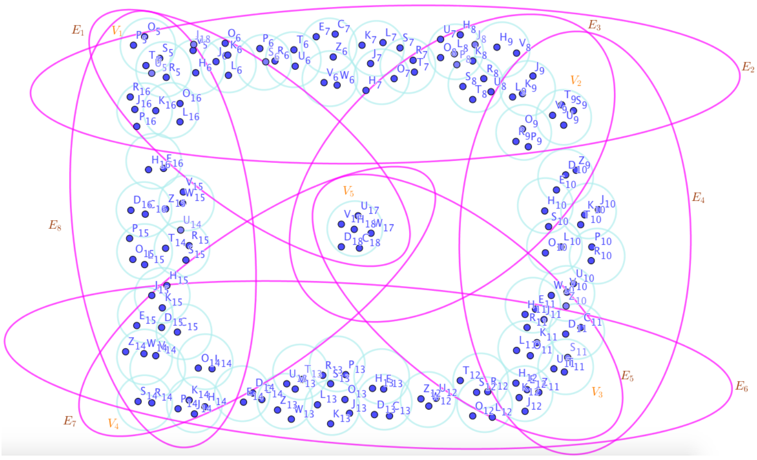

Figure 26. A SuperHyperWheel Associated to the Notions of 1-failed SuperHyperForcing in the Example (24).

An 1-failed SuperHyperForcing has the number of all the number of all the SuperHyperEdges minus two numbers excerpt two SuperHyperNeighbors. □

Example 24. In the Figure (26), the connected SuperHyperWheel $NSHW : (V, E)$, is highlighted and featured. The obtained SuperHyperSet, by the Algorithm in previous result, of the SuperHyperVertices of the connected SuperHyperWheel $NSHW : (V, E)$, in the SuperHyperModel (26), is the 1-failed SuperHyperForcing.

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