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Probabilistic Interval-Valued Neutrosophic for Assessment of University Language Service Talent Development of Hainan Province Free Trade Port

Ziyu Wei*

Department of General Education Foreign Languages, Haikou University of Economics, Haikou, Hainan, 570000, China

*Corresponding author, E-mail: nini1610@sina.com

Abstract: The need for strong, globally focused language services has increased significantly as Hainan Province develops its Free Trade Port (FTP). Hainan's universities are essential to this development because they develop talent, offer translation and interpretation services, and promote intercultural dialogue. Using uncertainty framework, this study attempts to assess the present state and caliber of university language service development in support of the FTP. The availability of multilingual services, the caliber of translations, assistance for overseas students, and the incorporation of digital language aids were among the ten assessment criteria that were determined. We use the Probabilistic Interval-Valued Neutrosophic Hesitant Fuzzy Set (PIVNHFS) to solve uncertainty information. The contributions, preparedness, and innovation levels of ten university programs and service centers were evaluated. The results point to both service capacity strengths and weaknesses, especially with relation to adopted digital tools, applied translation, and cooperation with industry stakeholders. Considering regional growth and economic globalization, the assessment supports language services capacity building and strategic planning.

Keywords: Probabilistic Interval-Valued Neutrosophic Hesitant Fuzzy Set; University Language Service; Hainan Province Free Trade Port.

1. Introduction

In the actual world, there is a lot of uncertainty in things like medical diagnosis, expert systems, information fusion, and intelligent calculations. The establishment of mathematical models of uncertainty is crucial when it comes to solving specific choice difficulties. Uncertainty must be considered, particularly when tackling huge data issues. Therefore, Zadeh introduced the fuzzy set theory to explain the difficulties' uncertainty[1]. The intuitionistic fuzzy set, hesitant fuzzy set

(HFS), dual hesitant fuzzy set (DHFS), interval-valued intuitionistic fuzzy set (IVIFS), necessary and possible hesitant fuzzy sets, and dual hesitant fuzzy probability are among the numerous new varieties of fuzzy set theory that have since been created. An effective method for identifying unclear information is fuzzy set theory[2].

A novel kind of fuzzy set was presented by Smarandache: the neutrosophic set (NS). Truth membership $TA(x) \in [0,1]$, indeterminacy membership $IA(x) \in [0,1]$, and falsity membership $FA(x) \in [0,1]$ are the three independent members that make up NS A. Algebraic systems have made extensive use of NS theory. Then, several additional NS types were created, such as interval NS (INS) and single-valued NS (SVNS)[3].

1.1 Literature Review

There is a pressing need for top talent in outbound tourism due to the growth of the Hainan Free Trade Port. To investigate the talent cultivation path for outbound tourism, this study focuses on the Hainan Free Trade Port's policy backdrop. After analyzing the need for talent, Chen[4] highlighted the present shortcomings in developing talent, including problems with faculty development, practical teaching, and curriculum design. Appropriate optimization techniques are suggested. According to the research, initiatives including curriculum internationalization and industry-education integration may successfully raise the standard of talent development and support the growth of the Hainan Free Trade Port's tourist sector.

The purpose of this research is to investigate, from the point of viewpoint of stakeholders, the development of a language service system for the Hainan Free Trade Port. With the growth of the Hainan Free Trade Port, language services are crucial for fostering intercultural dialogue, advancing global collaboration, and stimulating the economy. Residents of the Hainan Free Trade Port, businesses, and pertinent government agencies serve as the main research subjects by Cheng et al. [5]. Surveys and in-depth interviews are two techniques used to gather data to examine the expectations and needs of various stakeholders regarding language services. To realize mutual advantages, suggestions are offered based on this research for building a language service system that suits the needs and features of the Hainan Free Trade Port.

The Hainan Free Trade Port's construction has raised the bar for talent development in higher education and opened a lot of job opportunities for talented individuals from around the world. As one of Hainan's most prominent educational institutions, Hainan University has the significant duty of developing top-tier international talent. This study examines the variables influencing foreign workers' decision to work in Hainan, also known as Qiong, via investigation and analysis and suggests solutions for current issues. Although the building of the Hainan Free Trade Port is highly applauded, it is discovered that there is still space for improvement in the areas of talent policy promotion, overseas students' willingness to work, and connecting professional settings with job demands.

Wang et al. [6] made recommendations for improving the quality of international talent cultivation and their willingness to work in Hainan, which will support the sustainable development of Hainan Free Trade Port. These recommendations include enhancing university-policy cooperation, improving the teaching system, putting in place an inter-professional training model, and more.

2. Probabilistic Interval-Valued Neutrosophic Hesitant Fuzzy Set (PIVNHFS)

PIVNHFS can be defined as[7]:

$$H = \{(y, T_H(y)|P^T(x), I_H(y)|P^I(y), F_H(y)|P^F(y))|y \in Y\}$$

$P^T(x), P^I(x), P^F(x)$ are the probabilistic information for three membership degrees.

$T_H(y)$ is a truth membership hesitant degree.

$I_H(y)$ is an indeterminacy membership hesitant degree.

$F_H(y)$ is a falsity membership hesitant degree.

$$A = [A^L, A^U] \sqsubseteq [0,1], B = [B^L, B^U] \sqsubseteq [0,1], C = [C^L, C^U] \sqsubseteq [0,1]$$

$$0 \leq \sup A^+ + \sup B^+ + \sup C^+ \leq 3$$

$$P_A^T \in [0,1], P_B^T \in [0,1], P_C^T \in [0,1]$$

$$\sum_{A=1}^{\#T} P_A^T = 1, \sum_{B=1}^{\#I} P_B^I = 1, \sum_{C=1}^{\#F} P_C^F = 1$$

$$A \in T_H(y), B \in I_H(y), C \in F_H(y)$$

$$A^+ = \bigcup_{A \in T_A(y)} \max\{A\}$$

$$B^+ = \bigcup_{B \in T_B(y)} \max\{B\}$$

$$C^+ = \bigcup_{C \in T_C(y)} \max\{C\}$$

$\#T$ is a total number of $T_H(y)|P^T(y)$.

$\#I$ is a total number of $I_H(y)|P^I(y)$.

$\#F$ is a total number of $F_H(y)|P^F(y)$.

The score function of PIVNHFS can be defined as:

$$S(H) - \frac{\sum_{A=1}^{\#T}(A^L + A^U)P_A^T + \sum_{B=1}^{\#I}(2 - (B^L + B^U))P_B^I + \sum_{C=1}^{\#F}(2 - (C^L + C^U))P_C^F}{6}$$

The deviation function of PIVNHFS can be defined as:

$$D(H)-\frac{\begin{array}{c}\sum_{A=1}^{\#T}\left(A^{L}+A^{U}-2S(H)\right)P_{A}^{T}+\\ \sum_{B=1}^{\#I}\left(2-B^{L}+B^{U}-2S(H)\right)P_{B}^{I}+\\ \sum_{C=1}^{\#F}\left(2-C^{L}+C^{U}-2S(H)\right)P_{C}^{F}\end{array}}{6}$$

Let two PIVNHFS such as:

$H_1=\left\{T_{H_1}(y)\middle|P^{T_1},I_{H_1}(y)\middle|P^{I_1},F_{H_1}(y)|P^{F_1}\right\}$ and $H_2=\left\{T_{H_2}(y)\middle|P^{T_2},I_{H_2}(y)\middle|P^{I_2},F_{H_2}(y)|P^{F_2}\right\}$

$$(H_1)^C=\bigcup_{A_1\in T_1,B_1\in I_1,C_1\in F_1}\left\{C_1|P_1^{F_1},[1-B_1^U,1-B_1^L]P_1^{I_1},A_1|P_1^{T_1}\right\}$$

$$H_1\cap H_2=\bigcap_{\substack{A_1\in T_1,B_1\in I_1,C_1\in F_1,\\ A_2\in T_2,B_2\in I_2,C_2\in F_2}}\left\{\begin{array}{l}\left\{A_1\cap A_2|\dfrac{P_1^{T_1}P_2^{T_2}}{\sum P_1^{T_1}P_2^{T_2}}\right\},\\ \left\{B_1\cup B_2|\dfrac{P_1^{I_1}P_2^{I_2}}{\sum P_1^{I_1}P_2^{I_2}}\right\},\\ \left\{C_1\cup C_2|\dfrac{P_1^{F_1}P_2^{F_2}}{\sum P_1^{F_1}P_2^{F_2}}\right\}\end{array}\right\}$$

$$H_1\cup H_2=\bigcup_{\substack{A_1\in T_1,B_1\in I_1,C_1\in F_1,\\ A_2\in T_2,B_2\in I_2,C_2\in F_2}}\left\{\begin{array}{l}\left\{A_1\cup A_2|\dfrac{P_1^{T_1}P_2^{T_2}}{\sum P_1^{T_1}P_2^{T_2}}\right\},\\ \left\{B_1\cap B_2|\dfrac{P_1^{I_1}P_2^{I_2}}{\sum P_1^{I_1}P_2^{I_2}}\right\},\\ \left\{C_1\cap C_2|\dfrac{P_1^{F_1}P_2^{F_2}}{\sum P_1^{F_1}P_2^{F_2}}\right\}\end{array}\right\}$$

$$H_1^{\alpha}=\bigcup_{A_1\in T_1,B_1\in I_1,C_1\in F_1}\left\{\begin{array}{l}\left\{[(A_1^L)^{\alpha},(A_1^U)^{\alpha}]|P_1^{T_1}\right\},\\ \left\{\left[\begin{array}{l}1-(1-B_1^L)^{\alpha},\\ 1-(1-B_1^U)^{\alpha}\end{array}\right]|P_1^{I_1}\right\},\\ \left\{\left[\begin{array}{l}1-(1-C_1^L)^{\alpha},\\ 1-(1-C_1^U)^{\alpha}\end{array}\right]|P_1^{F_1}\right\}\end{array}\right\}$$

$$\alpha H_1=\bigcup_{A_1\in T_1,B_1\in I_1,C_1\in F_1}\left\{\begin{array}{l}\left\{\left[\begin{array}{l}1-(1-A_1^L)^{\alpha},\\ 1-(1-A_1^U)^{\alpha}\end{array}\right]|P_1^{T_1}\right\},\\ \left\{[(B_1^L)^{\alpha},(B_1^U)^{\alpha}]|P_1^{I_1}\right\},\\ \left\{[(C_1^L)^{\alpha},(C_1^U)^{\alpha}]|P_1^{F_1}\right\}\end{array}\right\}$$

$$H_1\oplus H_2=\bigcup_{\substack{A_1\in T_1,B_1\in I_1,C_1\in F_1,\\ A_2\in T_2,B_2\in I_2,C_2\in F_2}}\left\{\begin{array}{l}\left\{\left[\begin{array}{l}A_1^L+A_2^L-A_1^LA_2^L,\\ A_1^U+A_2^U-A_1^UA_2^u\end{array}\right]|P_1^{T_1}P_2^{T_2}\right\},\\ \left\{[B_1^LB_2^L,B_1^UB_2^U]|P_1^{I_1}P_2^{I_2}\right\},\\ \left\{[C_1^LC_2^L,C_1^UC_2^U]|P_1^{F_1}P_2^{F_2}\right\}\end{array}\right\}$$

$$H_1 \otimes H_2 = \bigcup_{\substack{A_1 \in T_1, B_1 \in I_1, C_1 \in F_1, \\ A_2 \in T_2, B_2 \in I_2, C_2 \in F_2}} \left\{ \begin{array}{c} \left\{ [A_1^L A_2^L, A_1^U A_2^U] | P_1^{T_1} P_2^{T_2} \right\}, \\ \left\{ \left[\begin{array}{c} B_1^L + B_2^L - B_1^L B_2^L \\ , B_1^U + B_2^U - B_1^U B_2^U \end{array} \right] | P_1^{I_1} P_2^{I_2} \right\}, \\ \left\{ \left[\begin{array}{c} C_1^L + C_2^L - C_1^L C_2^L, \\ C_1^U + C_2^U - C_1^U C_2^U \end{array} \right] | P_1^{F_1} P_2^{F_2} \right\} \end{array} \right\}$$

3. Results and Discussion

This section uses ten criteria and ten alternatives as shown in Figure 1. Steps of the proposed approach are organized as follows:

1. Probabilistic Interval-Valued Neutrosophic Hesitant Fuzzy Set is used to evaluate the criteria of this study.
2. Probabilistic Interval-Valued Neutrosophic Hesitant Fuzzy Set is used to evaluate the alternatives of this study.
3. Score function is used to obtain crisp values.

$$S(H) - \frac{\begin{array}{c} \sum_{A=1}^{\#T} (A^L + A^U) P_A^T + \\ \sum_{B=1}^{\#I} \left(2 - (B^L + B^U)\right) P_B^I + \\ \sum_{C=1}^{\#F} \left(2 - (C^L + C^U)\right) P_C^F \end{array}}{6}$$

4. Combine crisp values into a single matrix.
5. Use the average method to obtain final value of each alternative.

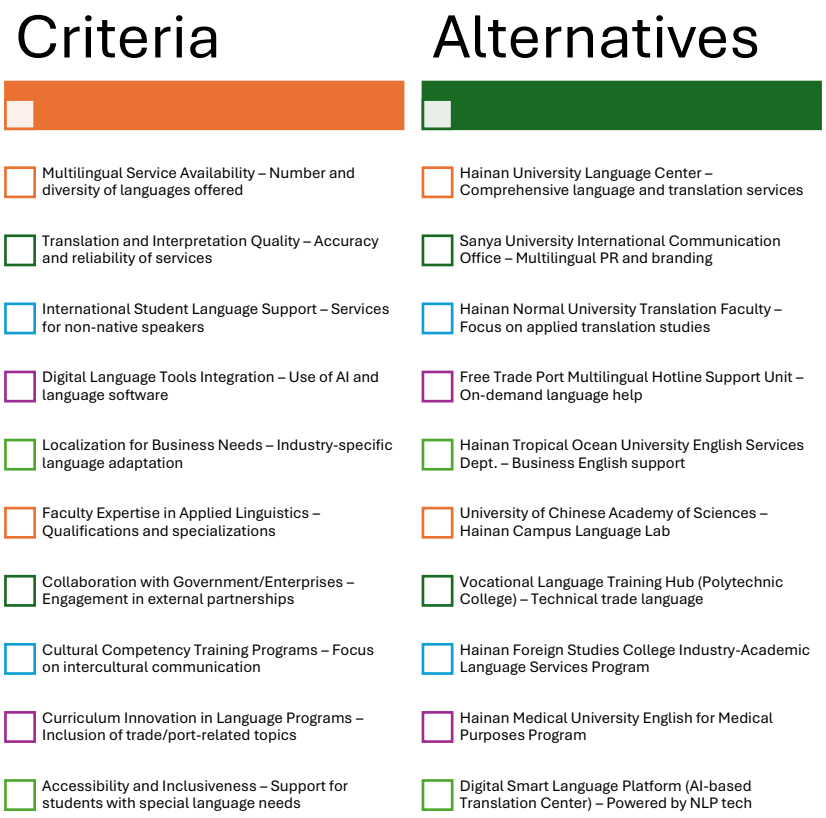

Figure 1. Standards for Assessment of University Language Service Development of Hainan Province Free Trade Port

Table A1. shows the Probabilistic Interval-Valued Neutrosophic Hesitant Fuzzy Set of the criteria and alternatives.

The score function is used to obtain crisp values as shown in Tables 1.

Table 1. Crisp values.

	$HFSC_1$	$HFSC_2$	$HFSC_3$	$HFSC_4$	$HFSC_5$	$HFSC_6$	$HFSC_7$	$HFSC_8$	$HFSC_9$	$HFSC_{10}$
$HFSA_1$	0.69	0.511667	0.30667	0.52333	0.6667	0.66167	0.60333	0.307	0.69	0.5116667
$HFSA_2$	0.69	0.603333	0.66167	0.66667	0.5233	0.30667	0.69	0.523	0.661667	0.3066667
$HFSA_3$	0.511667	0.306667	0.52333	0.66667	0.6617	0.51167	0.51167	0.667	0.666667	0.5233333
$HFSA_4$	0.523333	0.306667	0.51167	0.69	0.6033	0.69	0.30667	0.662	0.523333	0.6666667
$HFSA_5$	0.666667	0.523333	0.30667	0.51167	0.69	0.60333	0.52333	0.603	0.306667	0.6616667
$HFSA_6$	0.666667	0.666667	0.52333	0.66667	0.6033	0.66167	0.66667	0.662	0.511667	0.6033333
$HFSA_7$	0.661667	0.603333	0.51167	0.60333	0.6667	0.52333	0.60333	0.512	0.69	0.69
$HFSA_8$	0.603333	0.69	0.69	0.69	0.5233	0.30667	0.69	0.603	0.603333	0.5116667
$HFSA_9$	0.603333	0.511667	0.60333	0.51167	0.3067	0.51167	0.51167	0.307	0.661667	0.3066667
$HFSA_{10}$	0.511667	0.511667	0.51167	0.66667	0.3067	0.51167	0.66667	0.667	0.666667	0.5233333
	$HFSC_1$	$HFSC_2$	$HFSC_3$	$HFSC_4$	$HFSC_5$	$HFSC_6$	$HFSC_7$	$HFSC_8$	$HFSC_9$	$HFSC_{10}$
$HFSA_1$	0.523333	0.511667	0.306667	0.523333	0.666667	0.661667	0.603333	0.306667	0.69	0.511667
$HFSA_2$	0.306667	0.603333	0.661667	0.523333	0.523333	0.306667	0.523333	0.523333	0.661667	0.306667
$HFSA_3$	0.511667	0.306667	0.523333	0.306667	0.523333	0.511667	0.306667	0.666667	0.666667	0.523333
$HFSA_4$	0.69	0.306667	0.511667	0.511667	0.306667	0.69	0.511667	0.661667	0.523333	0.666667
$HFSA_5$	0.603333	0.523333	0.306667	0.69	0.511667	0.603333	0.69	0.666667	0.306667	0.661667
$HFSA_6$	0.523333	0.523333	0.523333	0.603333	0.69	0.523333	0.603333	0.661667	0.511667	0.603333
$HFSA_7$	0.69	0.69	0.69	0.69	0.511667	0.69	0.511667	0.69	0.69	0.69
$HFSA_8$	0.603333	0.603333	0.603333	0.511667	0.69	0.603333	0.69	0.511667	0.603333	0.511667
$HFSA_9$	0.69	0.511667	0.306667	0.523333	0.666667	0.661667	0.603333	0.69	0.661667	0.306667
$HFSA_{10}$	0.511667	0.69	0.603333	0.661667	0.666667	0.523333	0.306667	0.511667	0.666667	0.523333
	$HFSC_1$	$HFSC_2$	$HFSC_3$	$HFSC_4$	$HFSC_5$	$HFSC_6$	$HFSC_7$	$HFSC_8$	$HFSC_9$	$HFSC_{10}$
$HFSA_1$	0.69	0.511667	0.306667	0.523333	0.666667	0.661667	0.603333	0.306667	0.69	0.511667
$HFSA_2$	0.603333	0.603333	0.661667	0.666667	0.523333	0.306667	0.69	0.523333	0.661667	0.306667
$HFSA_3$	0.661667	0.69	0.523333	0.666667	0.661667	0.511667	0.603333	0.666667	0.666667	0.523333
$HFSA_4$	0.666667	0.603333	0.69	0.69	0.69	0.69	0.661667	0.661667	0.523333	0.666667

HFSA5	0.523333	0.661667	0.603333	0.69	0.603333	0.69	0.666667	0.603333	0.306667	0.661667
HFSA6	0.306667	0.666667	0.661667	0.603333	0.661667	0.603333	0.523333	0.661667	0.511667	0.603333
HFSA7	0.69	0.511667	0.306667	0.523333	0.666667	0.661667	0.603333	0.69	0.69	0.69
HFSA8	0.666667	0.661667	0.603333	0.69	0.511667	0.306667	0.523333	0.511667	0.603333	0.511667
HFSA9	0.523333	0.306667	0.511667	0.69	0.603333	0.661667	0.666667	0.306667	0.661667	0.306667
HFSA10	0.306667	0.511667	0.69	0.603333	0.661667	0.666667	0.523333	0.306667	0.666667	0.523333

The average method is used to calculate the final score of each alternative as shown in Table 2. The alternatives are ranked as shown in Table 2

Table 2. Average method values.

Alternatives	Values	Ranks
HFSA1	0.541611	3
HFSA2	0.537333	2
HFSA3	0.552389	4
HFSA4	0.580222	7
HFSA5	0.565667	6
HFSA6	0.593389	9
HFSA7	0.621389	10
HFSA8	0.581111	8
HFSA9	0.523167	1
HFSA10	0.555611	5

4. Conclusions

According to the assessment, there are notable differences in terms of quality, digital integration, and compliance with international trade standards, even though several Hainan institutions have set up basic language service infrastructures. While vocational colleges excel in providing hands-on training for industry-specific demands, institutions like Hainan University and Sanya University lead in providing complete services and bilingual assistance. Standardized service quality, a lack of skilled translators for specialized businesses, and the restricted usage of cutting-edge digital platforms are still problems, nevertheless. This study used the Probabilistic Interval-Valued Neutrosophic Hesitant Fuzzy Set (PINHFS). The score function is used to obtain crisp values. The report suggests investments in AI-driven translation and cultural training tools, a uniform provincial framework for language service development, and improved collaborations between academic institutions and trade associations. Universities in Hainan may improve their contributions to the Free Trade Port program and guarantee that their graduates are linguistically and internationally competent for cross-border interaction by tackling these issues.

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Appendix

Table A1. PINHFS.

	$HFSC_1$	$HFSC_2$	$HFSC_3$	$HFSC_4$	$HFSC_5$	$HFSC_6$	$HFSC_7$	$HFSC_8$	$HFSC_9$	$HFSC_{10}$
$HFSA_1$	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}
$HFSA_2$	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}
$HFSA_3$	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}
$HFSA_4$	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|0.8}}
$HFSA_5$	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}
$HFSA_6$	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}
HFS	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2

$HFSA_7$		.3]|0.6},{[0.2,0.3]|1}}	3]|0.7,[0.3,0.4]|0.3}}	.3]|0.6},{[0.2,0.3]|1}}		.2]|0.2,[0.2,0.3]|0.8}}	.3]|0.6},{[0.2,0.3]|1}}	3]|0.7,[0.3,0.4]|0.3}}	]|1},{0.3,0.4]|1}}	]|1},{0.3,0.4]|1}}
$HFSA_8$	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}
$HFSA_9$	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}
$HFSA_{10}$	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}
	$HFSC_1$	$HFSC_2$	$HFSC_3$	$HFSC_4$	$HFSC_5$	$HFSC_6$	$HFSC_7$	$HFSC_8$	$HFSC_9$	$HFSC_{10}$
$HFSA_1$	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}
$HFSA_2$	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}
$HFSA_3$	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}
$HFSA_4$	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}
$HFSA_5$	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}
$HFSA_6$	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}
$HFSA_7$	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}
$HFSA_8$	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}
$HFSA_9$	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}
$HFSA_{10}$	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}
	$HFSC_1$	$HFSC_2$	$HFSC_3$	$HFSC_4$	$HFSC_5$	$HFSC_6$	$HFSC_7$	$HFSC_8$	$HFSC_9$	$HFSC_{10}$
$HFSA_1$	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}
$HFSA_2$	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}
$HFSA_3$	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}
$HFSA_4$	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}
$HFSA_5$	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}

HFSA6	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}
HFSA7	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}
HFSA8	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}
HFSA9	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}
HFSA10	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.4,0.5]|0.5,[0.5,0.6]]|0.5},{[0.2,0.3]|1},{[0.3,0.3]|0.7,[0.3,0.4]|0.3}}	{{[0.3,0.4]|0.1,[0.4,0.4]|0.1,[0.4,0.5]|0.8},{[0.1,0.2]|1},{0.3,0.4]|1}}	{{[0.5,0.6]|1},{[0.1,0.2]|0.4,[0.2,0.3]|0.6},{[0.2,0.3]|1}}	{{[0.7,0.8]|1},{[0,0.1]|1},{[0.1,0.2]|1}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}	{{[0.2,0.3]|1},{[0.1,0.2]|1},{[0.4,0.5]|0.7,[0.5,0.6]|0.3}}	{{[0.6,0.7]|1},{[0.1,0.1]|1},{[0.2,0.3]|1}}	{{[0.6,0.7]|1},{[0.1,0.2]|1},{[0.1,0.2]|0.2,[0.2,0.3]|0.8}}

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