

--Algoritmo Amplify Iteracion 1--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 2

R1: if X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 28 examples.

R2: if X0 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'MP'] and X3 is ['SN', 'Z', 'SP', 'MP'] then Versicolor created with: 8 examples.

Reglas Iris virginica: 6

R3: if X3 is ['HP'] then Virginica created with: 8 examples.

R4: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 13 examples.

R5: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 13 examples.

R6: if X2 is ['HN', 'MN', 'SN', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP'] then Virginica created with: 9 examples.

R7: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 4 examples.

R8: if X2 is ['HN', 'MN', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP', 'MP', 'HP'] then Virginica created with: 3 examples.

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P. Acierto: 90.0%

P. No Clasificados: 0.0%

P. Fallo: 10.0%

--Algoritmo Amplify Iteracion 2--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 6

R1: if X3 is ['SN', 'Z'] then Versicolor created with: 20 examples.

R2: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 14 examples.

R3: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.

R4: if X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP']

then Versicolor created with: 5 examples.
R5: if X2 is ['HN', 'MN', 'SN', 'Z', 'HP'] and X3 is ['SN', 'Z', 'SP']
then Versicolor created with: 3 examples.
R6: if X0 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X1 is ['HN', 'Z',
'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'MP'] and X3 is
['SN', 'Z', 'SP', 'MP'] then Versicolor created with: 1 examples.

Reglas Iris virginica: 7

R7: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP']
then Virginica created with: 12 examples.
R8: if X3 is ['HP'] then Virginica created with: 6 examples.
R9: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['MP', 'HP']
then Virginica created with: 4 examples.
R10: if X1 is ['MN', 'MP', 'HP'] and X3 is ['MN', 'SP', 'MP', 'HP'] then
Virginica created with: 2 examples.
R11: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP']
then Virginica created with: 4 examples.
R12: if X2 is ['HN', 'MN', 'SN', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP']
then Virginica created with: 3 examples.
R13: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP']
then Virginica created with: 1 examples.

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P. Acierto: 86.7%

P. No Clasificados: 0.0%

P. Fallo: 13.3%

--Algoritmo Amplify Iteracion 3--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X3 is ['SN', 'Z'] then Versicolor created with: 19 examples.

R2: if X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 29 examples.

R3: if X0 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'MP'] and X3 is ['SN', 'Z', 'SP', 'MP'] then Versicolor created with: 8 examples.

Reglas Iris virginica: 4

R4: if X3 is ['HP'] then Virginica created with: 9 examples.

R5: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 10 examples.

R6: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP']

then Virginica created with: 6 examples.

R7: if X2 is ['HN', 'MN', 'SN', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP']
then Virginica created with: 3 examples.

```
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'Prediccion', 'Resultado')
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'Versicolor', 'Fallo')
```

```
P. Acierto: 86.7%
P. No Clasificados: 0.0%
P. Fallo: 13.3%
```

--Algoritmo Amplify Iteracion 4--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 6

R1: if X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z'] then Versicolor created with: 18 examples.
R2: if X1 is ['Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 5 examples.
R3: if X0 is ['MN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X1 is ['MN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'SP'] then Versicolor created with: 4 examples.
R4: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 12 examples.
R5: if X2 is ['HN', 'MN', 'SN', 'Z', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 5 examples.
R6: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.

Reglas Iris virginica: 5

R7: if X3 is ['MP', 'HP'] then Virginica created with: 17 examples.
R8: if X0 is ['HN', 'Z', 'MP', 'HP'] and X1 is ['SN', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MN', 'SN', 'SP', 'MP', 'HP'] then Virginica created with: 5 examples.
R9: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.
R10: if X2 is ['HN', 'MN', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP', 'MP', 'HP'] then Virginica created with: 5 examples.
R11: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'MN', 'SP', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP'] then Virginica created with: 3 examples.

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('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
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'Prediccion', 'Resultado')
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'Versicolor', 'Acierto')
([5.7, 2.8, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.2, 5.7, 2.3], ['MP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.1, 5.4, 2.1], ['MP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([7.3, 2.9, 6.3, 1.8], ['HP', 'SN', 'HP', 'MP'], 'R8', 1, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.0, 5.2, 2.3], ['SP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.2, 5.1, 2.0], ['SP', 'Z', 'SP', 'MP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.8, 3.0, 5.5, 2.1], ['MP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.7, 2.5, 5.0, 2.0], ['SN', 'MN', 'SP', 'MP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')

```

```
([6.7, 3.3, 5.7, 2.1], ['SP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.0, 3.0, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R7', 0.7, 'Virginica',  
'Virginica', 'Acierto')
```

P. Acierto: 93.3%
P. No Clasificados: 0.0%
P. Fallo: 6.7%

--Algoritmo Amplify Iteracion 5--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 5

R1: if X3 is ['SN', 'Z'] then Versicolor created with: 18 examples.
R2: if X1 is ['SN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN',
'Z', 'SP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created
with: 16 examples.
R3: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then
Versicolor created with: 1 examples.
R4: if X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN',
'Z', 'SP'] and X3 is ['SN', 'Z', 'MP'] then Versicolor created with: 1
examples.
R5: if X0 is ['MN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X1 is ['MN', 'SN',
'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and
X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 1 examples.

Reglas Iris virginica: 6

R6: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP']
then Virginica created with: 15 examples.
R7: if X3 is ['HP'] then Virginica created with: 9 examples.
R8: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['MP', 'HP']
then Virginica created with: 11 examples.
R9: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then
Virginica created with: 1 examples.
R10: if X2 is ['HN', 'MN', 'SN', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP']
then Virginica created with: 3 examples.
R11: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'MN',
'SP', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP'] then Virginica created
with: 1 examples.

```
('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',  
'Prediccion', 'Resultado')  
([6.9, 3.1, 5.4, 2.1], ['MP', 'Z', 'MP', 'HP'], 'R8', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.1, 2.8, 4.7, 1.2], ['Z', 'SN', 'SP', 'Z'], 'R1', 1, 'Versicolor',  
'Versicolor', 'Acierto')  
([5.7, 3.0, 4.2, 1.2], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',  
'Versicolor', 'Acierto')
```



```

([6.7, 3.0, 5.2, 2.3], ['SP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.4, 2.9, 4.3, 1.3], ['SP', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([7.3, 2.9, 6.3, 1.8], ['HP', 'SN', 'HP', 'MP'], 'R10', 1, 'Virginica',
'Virginica', 'Acierto')
([6.6, 3.0, 4.4, 1.4], ['SP', 'SN', 'SP', 'Z'], 'R2', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R2', 0.6, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.4, 3.7, 1.0], ['SN', 'HN', 'Z', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R5', 0.4, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.1, 3.0, 4.6, 1.4], ['Z', 'SN', 'SP', 'Z'], 'R2', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.4, 2.7, 5.3, 1.9], ['SP', 'MN', 'MP', 'MP'], 'R6', 1, 'Virginica',
'Virginica', 'Acierto')
([5.1, 2.5, 3.0, 1.1], ['MN', 'MN', 'SN', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([7.1, 3.0, 5.9, 2.1], ['MP', 'SN', 'HP', 'HP'], 'R8', 1, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.1, 5.6, 2.4], ['SP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.3, 5.7, 2.5], ['SP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.2, 5.1, 2.0], ['SP', 'Z', 'SP', 'MP'], 'R4', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([6.3, 2.5, 5.0, 1.9], ['Z', 'MN', 'SP', 'MP'], 'R6', 1, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.8, 5.1, 2.4], ['SN', 'SN', 'SP', 'HP'], 'R6', 1, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.2, 5.7, 2.3], ['MP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.7, 4.9, 1.8], ['Z', 'MN', 'SP', 'MP'], 'R6', 0.7, 'Virginica',
'Virginica', 'Acierto')
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R6', 0.7, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.8, 5.1, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R2', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R1', 0.7, 'Virginica',
'Versicolor', 'Fallo')
([6.5, 3.0, 5.2, 2.0], ['SP', 'SN', 'MP', 'MP'], 'R6', 0.7, 'Virginica',
'Virginica', 'Acierto')

```

P. Acierto: 90.0%
P. No Clasificados: 0.0%
P. Fallo: 10.0%

--Algoritmo Amplify Iteracion 6--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 8

R1: if X3 is ['SN', 'Z'] then Versicolor created with: 19 examples.
R2: if X1 is ['Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 5 examples.
R3: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.
R4: if X0 is ['MN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X1 is ['MN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 6 examples.
R5: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 7 examples.
R6: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.
R7: if X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'MP'] and X3 is ['SN', 'Z', 'MP'] then Versicolor created with: 6 examples.
R8: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 2 examples.

Reglas Iris virginica: 6

R9: if X3 is ['HP'] then Virginica created with: 12 examples.
R10: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 16 examples.
R11: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.
R12: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.
R13: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 5 examples.
R14: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'MN', 'SP', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP'] then Virginica created with: 1 examples.

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo', 'Prediccion', 'Resultado')
([5.6, 2.9, 3.6, 1.3], ['SN', 'SN', 'SN', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([6.3, 2.9, 5.6, 1.8], ['Z', 'SN', 'MP', 'MP'], 'R10', 0.7, 'Virginica', 'Virginica', 'Acierto')
([6.4, 3.2, 5.3, 2.3], ['SP', 'Z', 'MP', 'HP'], 'R9', 1, 'Virginica', 'Virginica', 'Acierto')

```

([5.6, 3.0, 4.5, 1.5], ['SN', 'SN', 'SP', 'SP'], 'R5', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.1, 2.8, 4.7, 1.2], ['Z', 'SN', 'SP', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.7, 4.1, 1.0], ['SN', 'MN', 'Z', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R5', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.7, 3.9, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.4, 3.1, 5.5, 1.8], ['SP', 'Z', 'MP', 'MP'], 'R7', 0.7, 'Virginica',
'Versicolor', 'Fallo')
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R5', 1, 'Virginica',
'Versicolor', 'Fallo')
([5.6, 2.8, 4.9, 2.0], ['SN', 'SN', 'SP', 'MP'], 'R10', 1, 'Virginica',
'Virginica', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R4', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 3.4, 4.5, 1.6], ['Z', 'SP', 'SP', 'SP'], 'R2', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.6, 3.0, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R10', 1, 'Virginica',
'Virginica', 'Acierto')
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R9', 1, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R9', 1, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.1, 5.1, 2.3], ['MP', 'Z', 'SP', 'HP'], 'R9', 1, 'Virginica',
'Virginica', 'Acierto')
([7.6, 3.0, 6.6, 2.1], ['HP', 'SN', 'HP', 'HP'], 'R13', 1, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.2, 5.1, 2.0], ['SP', 'Z', 'SP', 'MP'], 'R7', 0.7, 'Virginica',
'Versicolor', 'Fallo')
([5.7, 2.5, 5.0, 2.0], ['SN', 'MN', 'SP', 'MP'], 'R10', 1, 'Virginica',
'Virginica', 'Acierto')
([6.3, 3.4, 5.6, 2.4], ['Z', 'SP', 'MP', 'HP'], 'R9', 1, 'Virginica',
'Virginica', 'Acierto')
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R10', 0.7, 'Virginica',
'Virginica', 'Acierto')
([7.4, 2.8, 6.1, 1.9], ['HP', 'SN', 'HP', 'MP'], 'R10', 1, 'Virginica',
'Virginica', 'Acierto')
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R4', 1, 'Virginica',
'Versicolor', 'Fallo')

```

P. Acierto: 86.7%
P. No Clasificados: 0.0%
P. Fallo: 13.3%

--Algoritmo Amplify Iteracion 7--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 6

R1: if X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z'] then Versicolor created with: 19 examples.
R2: if X1 is ['Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 5 examples.
R3: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 12 examples.
R4: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.
R5: if X0 is ['MN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X1 is ['MN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'SP'] then Versicolor created with: 1 examples.
R6: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['SN', 'SP'] then Versicolor created with: 2 examples.

Reglas Iris virginica: 5

R7: if X3 is ['MP', 'HP'] then Virginica created with: 22 examples.
R8: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X1 is ['HN', 'MN', 'SP', 'MP', 'HP'] and X3 is ['SP', 'MP', 'HP'] then Virginica created with: 3 examples.
R9: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.
R10: if X2 is ['HN', 'MN', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP', 'MP', 'HP'] then Virginica created with: 7 examples.
R11: if X0 is ['HN', 'SN', 'Z', 'MP', 'HP'] and X1 is ['SN', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MN', 'SN', 'SP', 'MP', 'HP'] then Virginica created with: 4 examples.

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo', 'Prediccion', 'Resultado')
([5.6, 3.0, 4.5, 1.5], ['SN', 'SN', 'SP', 'SP'], 'R3', 1, 'Versicolor', 'Versicolor', 'Acierto')
([6.7, 3.0, 5.2, 2.3], ['SP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica', 'Virginica', 'Acierto')
([5.9, 3.2, 4.8, 1.8], ['Z', 'Z', 'SP', 'MP'], 'R7', 0.7, 'Versicolor', 'Virginica', 'Fallo')
([6.1, 2.8, 4.0, 1.3], ['Z', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R1', 0.7, 'Versicolor', 'Versicolor', 'Acierto')
([6.0, 2.9, 4.5, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R11', 0.7, 'Versicolor',

```

'Virginica', 'Fallo')
([6.1, 3.0, 4.9, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R7', 0.7, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.7, 2.6, 3.5, 1.0], ['SN', 'MN', 'SN', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R5', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 3.4, 4.5, 1.6], ['Z', 'SP', 'SP', 'SP'], 'R2', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.5, 4.0, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.1, 3.0, 4.6, 1.4], ['Z', 'SN', 'SP', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.5, 3.0, 5.2, 2.0], ['SP', 'SN', 'MP', 'MP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.8, 5.1, 2.4], ['SN', 'SN', 'SP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.6, 2.7, 4.2, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.3, 5.7, 2.5], ['SP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.7, 3.0, 4.2, 1.2], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.2, 2.9, 4.3, 1.3], ['Z', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 3.4, 5.6, 2.4], ['Z', 'SP', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.8, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([7.2, 3.2, 6.0, 1.8], ['MP', 'Z', 'HP', 'MP'], 'R10', 1, 'Virginica',
'Virginica', 'Acierto')
([6.8, 3.2, 5.9, 2.3], ['MP', 'Z', 'HP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.4, 2.7, 5.3, 1.9], ['SP', 'MN', 'MP', 'MP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([7.7, 3.8, 6.7, 2.2], ['HP', 'MP', 'HP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R7', 0.7, 'Virginica',
'Virginica', 'Acierto')
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R3', 1, 'Virginica',
'Versicolor', 'Fallo')

```

P. Acierto: 90.0%

P. No Clasificados: 0.0%

P. Fallo: 10.0%

--Algoritmo Amplify Iteracion 8--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 6

R1: if X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z'] then Versicolor created with: 17 examples.
R2: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 16 examples.
R3: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.
R4: if X1 is ['HN', 'MN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'SP'] then Versicolor created with: 9 examples.
R5: if X0 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'MP'] and X3 is ['SN', 'Z', 'SP', 'MP'] then Versicolor created with: 5 examples.
R6: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['SN', 'SP'] then Versicolor created with: 2 examples.

Reglas Iris virginica: 5

R7: if X3 is ['HP'] then Virginica created with: 11 examples.
R8: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 17 examples.
R9: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 15 examples.
R10: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.
R11: if X2 is ['HN', 'MN', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP', 'MP', 'HP'] then Virginica created with: 6 examples.

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo', 'Prediccion', 'Resultado')
([6.1, 2.9, 4.7, 1.4], ['Z', 'SN', 'SP', 'Z'], 'R1', 0.7, 'Versicolor', 'Versicolor', 'Acierto')
([6.2, 2.2, 4.5, 1.5], ['Z', 'HN', 'SP', 'SP'], 'R5', 0.8, 'Versicolor', 'Versicolor', 'Acierto')
([5.6, 2.5, 3.9, 1.1], ['SN', 'MN', 'Z', 'SN'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R2', 1, 'Virginica', 'Versicolor', 'Fallo')
([6.3, 2.5, 4.9, 1.5], ['Z', 'MN', 'SP', 'SP'], 'R4', 0.7, 'Versicolor', 'Versicolor', 'Acierto')
([7.6, 3.0, 6.6, 2.1], ['HP', 'SN', 'HP', 'HP'], 'R9', 1, 'Virginica', 'Virginica', 'Acierto')
([6.4, 2.9, 4.3, 1.3], ['SP', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R7', 1, 'Virginica', 'Virginica', 'Acierto')
([6.6, 3.0, 4.4, 1.4], ['SP', 'SN', 'SP', 'Z'], 'R2', 1, 'Versicolor', 'Versicolor', 'Acierto')

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([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R2', 1, 'Versicolor',
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'Versicolor', 'Acierto')
([6.4, 2.8, 5.6, 2.1], ['SP', 'SN', 'MP', 'HP'], 'R8', 1, 'Virginica',
'Virginica', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R4', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
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'Versicolor', 'Acierto')
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'Versicolor', 'Acierto')
([6.9, 3.2, 5.7, 2.3], ['MP', 'Z', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([5.5, 2.5, 4.0, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.1, 2.5, 3.0, 1.1], ['MN', 'MN', 'SN', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
([6.0, 2.2, 5.0, 1.5], ['Z', 'HN', 'SP', 'SP'], 'R5', 1, 'Virginica',
'Versicolor', 'Fallo')
([4.9, 2.5, 4.5, 1.7], ['HN', 'MN', 'SP', 'SP'], 'R2', 0.7, 'Virginica',
'Versicolor', 'Fallo')
([7.3, 2.9, 6.3, 1.8], ['HP', 'SN', 'HP', 'MP'], 'R11', 1, 'Virginica',
'Virginica', 'Acierto')
([7.2, 3.6, 6.1, 2.5], ['MP', 'SP', 'HP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
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'Virginica', 'Acierto')
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'Virginica', 'Acierto')
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'Virginica', 'Acierto')
([6.4, 2.8, 5.6, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R7', 1, 'Virginica',
'Virginica', 'Acierto')
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'Virginica', 'Acierto')

```

P. Acierto: 90.0%

P. No Clasificados: 0.0%

P. Fallo: 10.0%

--Algoritmo Amplify Iteracion 9--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 4

R1: if X3 is ['SN', 'Z'] then Versicolor created with: 19 examples.

R2: if X1 is ['MN', 'SN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 17 examples.
 R3: if X0 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'MP'] and X3 is ['SN', 'Z', 'MP'] then Versicolor created with: 4 examples.
 R4: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.

Reglas Iris virginica: 5

R5: if X3 is ['HP'] then Virginica created with: 7 examples.
 R6: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 10 examples.
 R7: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.
 R8: if X2 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 4 examples.
 R9: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 4 examples.

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo', 'Prediccion', 'Resultado')
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([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R2', 0.7, 'Versicolor', 'Versicolor', 'Acierto')
([6.0, 2.9, 4.5, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R2', 1, 'Versicolor', 'Versicolor', 'Acierto')
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([5.4, 3.0, 4.5, 1.5], ['MN', 'SN', 'SP', 'SP'], 'R2', 1, 'Versicolor', 'Versicolor', 'Acierto')
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R2', 1, 'Virginica', 'Versicolor', 'Fallo')
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([6.3, 2.3, 4.4, 1.3], ['Z', 'HN', 'SP', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
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([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([6.2, 2.9, 4.3, 1.3], ['Z', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')


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'Versicolor', 'Acierto')
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'Virginica', 'Acierto')
([6.3, 2.9, 5.6, 1.8], ['Z', 'SN', 'MP', 'MP'], 'R6', 0.7, 'Virginica',
'Virginica', 'Acierto')
([7.2, 3.6, 6.1, 2.5], ['MP', 'SP', 'HP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([7.6, 3.0, 6.6, 2.1], ['HP', 'SN', 'HP', 'HP'], 'R8', 1, 'Virginica',
'Virginica', 'Acierto')
([4.9, 2.5, 4.5, 1.7], ['HN', 'MN', 'SP', 'SP'], 'R2', 0.7, 'Virginica',
'Versicolor', 'Fallo')
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R2', 1, 'Virginica',
'Versicolor', 'Fallo')
([6.8, 3.0, 5.5, 2.1], ['MP', 'SN', 'MP', 'HP'], 'R8', 1, 'Virginica',
'Virginica', 'Acierto')
([6.2, 3.4, 5.4, 2.3], ['Z', 'SP', 'MP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.1, 5.1, 2.3], ['MP', 'Z', 'SP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.4, 3.2, 5.3, 2.3], ['SP', 'Z', 'MP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([7.7, 2.6, 6.9, 2.3], ['HP', 'MN', 'HP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.7, 4.9, 1.8], ['Z', 'MN', 'SP', 'MP'], 'R6', 0.7, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.8, 5.1, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R2', 1, 'Virginica',
'Versicolor', 'Fallo')

```

P. Acierto: 86.7%

P. No Clasificados: 0.0%

P. Fallo: 13.3%

--Algoritmo Amplify Iteracion 10--

Reglas Iris setosa: 1

R0: if X3 is ['HN', 'MN'] then Setosa created with: 13 examples.

Reglas Iris versicolor: 7

R1: if X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z'] then Versicolor created with: 18 examples.
R2: if X1 is ['MN', 'Z', 'SP', 'MP', 'HP'] and X3 is ['SN', 'SP'] then Versicolor created with: 6 examples.
R3: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP'] then Versicolor created with: 1 examples.
R4: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 4 examples.
R5: if X2 is ['HN', 'MN', 'SN', 'Z', 'HP'] and X3 is ['SN', 'Z', 'SP'] then Versicolor created with: 1 examples.
R6: if X0 is ['HN', 'MN', 'SN', 'Z', 'MP', 'HP'] and X1 is ['HN', 'Z', 'SP', 'MP', 'HP'] and X2 is ['HN', 'MN', 'SN', 'Z', 'SP', 'MP'] and X3 is ['SN', 'Z', 'MP'] then Versicolor created with: 1 examples.
R7: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then

Versicolor created with: 1 examples.

Reglas Iris virginica: 6

R8: if X3 is ['HP'] then Virginica created with: 12 examples.

R9: if X1 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 14 examples.

R10: if X0 is ['Z'] and X1 is ['HN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.

R11: if X2 is ['HN', 'MN', 'MP', 'HP'] and X3 is ['SN', 'Z', 'SP', 'MP', 'HP'] then Virginica created with: 7 examples.

R12: if X0 is ['Z'] and X1 is ['SN'] and X2 is ['SP'] and X3 is ['SP'] then Virginica created with: 1 examples.

R13: if X0 is ['HN', 'MN', 'SN', 'SP', 'MP', 'HP'] and X3 is ['MP', 'HP'] then Virginica created with: 2 examples.

```
('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
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'Versicolor', 'Acierto')
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'Versicolor', 'Acierto')
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'Versicolor', 'Acierto')
([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R4', 0.6, 'Versicolor',
'Versicolor', 'Acierto')
([6.4, 2.7, 5.3, 1.9], ['SP', 'MN', 'MP', 'MP'], 'R9', 1, 'Virginica',
'Virginica', 'Acierto')
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'Versicolor', 'Acierto')
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'Virginica', 'Acierto')
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.4, 3.7, 1.0], ['SN', 'HN', 'Z', 'SN'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
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'Versicolor', 'Acierto')
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'Virginica', 'Acierto')
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([6.3, 2.7, 4.9, 1.8], ['Z', 'MN', 'SP', 'MP'], 'R9', 0.7, 'Virginica',
'Virginica', 'Acierto')
```

P. Acierto: 96.7%

P. No Clasificados: 0.0%

P. Fallo: 3.3%

--- Informe de resultados del algoritmo --- Amplify

Numero total de ejemplos: 150

Numero de clases: 3

Numero de variables: 4

Porcentaje de ejemplos usados para entrenamiento: 0.8%

Porcentaje de ejemplos usados para test: 0.2%

Numero total de ejemplos entrenamiento: 120

Numero total de ejemplos test: 30

Numero total de ejecuciones: 10

Tiempo de ejecucion del algoritmo: 0.3s

----Resumen pruebas algoritmo----

Castro, Castro-schez, zurita

Media de P. Acierto: 89.7%

Media de P. No Clasificados: 0.0%

Media de P. No Clasificados: 10.3%

Prueba	R. Setosa	R. Versi	R. Virgi	Total	Acierto	NC	Fallo
1	1	2	6	9	90.0%	0.0%	10.0%
2	1	6	7	14	86.7%	0.0%	13.3%
3	1	3	4	8	86.7%	0.0%	13.3%

4	1	6	5	12	93.3%	0.0%	6.7%
5	1	5	6	12	90.0%	0.0%	10.0%
6	1	8	6	15	86.7%	0.0%	13.3%
7	1	6	5	12	90.0%	0.0%	10.0%
8	1	6	5	12	90.0%	0.0%	10.0%
9	1	4	5	10	86.7%	0.0%	13.3%
10	1	7	6	14	96.7%	0.0%	3.3%

--Algoritmo Elsevier Iteracion 1--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 7 examples.

R2: if X2 is SN then Versicolor created with: 5 examples.

R3: if X0 is SP and X3 is SP then Versicolor created with: 2 examples.

Reglas Iris virginica: 2

R4: if X2 is MP then Virginica created with: 11 examples.

R5: if X0 is HP then Virginica created with: 3 examples.

```
('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
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'Virginica', 'Acierto')
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R3', 0.2, 'Virginica',
'Versicolor', 'Fallo')
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'Virginica', 'Acierto')
([5.6, 2.5, 3.9, 1.1], ['SN', 'MN', 'Z', 'SN'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.3, 5.7, 2.5], ['SP', 'Z', 'MP', 'HP'], 'R4', 0.6, 'Virginica',
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([6.4, 3.2, 5.3, 2.3], ['SP', 'Z', 'MP', 'HP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([7.6, 3.0, 6.6, 2.1], ['HP', 'SN', 'HP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([4.9, 2.5, 4.5, 1.7], ['HN', 'MN', 'SP', 'SP'], 'R1', 0.2, 'Virginica',
'Versicolor', 'Fallo')
([7.7, 3.0, 6.1, 2.3], ['HP', 'SN', 'HP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.7, 2.5, 5.8, 1.8], ['SP', 'MN', 'MP', 'MP'], 'R4', 0.5, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.8, 5.1, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R3', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([6.9, 3.1, 5.4, 2.1], ['MP', 'Z', 'MP', 'HP'], 'R4', 1.0, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.1, 5.6, 2.4], ['SP', 'Z', 'MP', 'HP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')

```

P. Acierto: 86.7%

P. No Clasificados: 3.3%

P. Fallo: 10.0%

--Algoritmo Elsevier Iteracion 2--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 9 examples.

R2: if X2 is SN then Versicolor created with: 5 examples.

R3: if X0 is SP and X3 is SP then Versicolor created with: 2 examples.

Reglas Iris virginica: 3

R4: if X2 is MP then Virginica created with: 8 examples.

R5: if X3 is HP then Virginica created with: 2 examples.

R6: if X0 is Z and X1 is MN then Virginica created with: 1 examples.

```

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
([6.0, 2.2, 5.0, 1.5], ['Z', 'HN', 'SP', 'SP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.5, 4.9, 1.5], ['Z', 'MN', 'SP', 'SP'], 'R6', 0.6, 'Versicolor',
'Virginica', 'Fallo')

```

```
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',  
'Versicolor', 'Acierto')  
([7.2, 3.6, 6.1, 2.5], ['MP', 'SP', 'HP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.4, 2.9, 4.3, 1.3], ['SP', 'SN', 'Z', 'Z'], 'R1', 0.5, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R3', 0.3, 'Versicolor',  
'Versicolor', 'Acierto')  
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R1', 0.8, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R6', 0.7, 'Versicolor',  
'Virginica', 'Fallo')  
([5.6, 3.0, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.8, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.2, 2.9, 4.3, 1.3], ['Z', 'SN', 'Z', 'Z'], 'R1', 0.5, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.4, 3.1, 5.5, 1.8], ['SP', 'Z', 'MP', 'MP'], 'R4', 0.9, 'Virginica',  
'Virginica', 'Acierto')  
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.8, 3.2, 5.9, 2.3], ['MP', 'Z', 'HP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.9, 3.1, 5.1, 2.3], ['MP', 'Z', 'SP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.4, 'Virginica',  
'Virginica', 'Acierto')  
([7.1, 3.0, 5.9, 2.1], ['MP', 'SN', 'HP', 'HP'], 'R5', 0.7, 'Virginica',  
'Virginica', 'Acierto')  
([6.3, 2.9, 5.6, 1.8], ['Z', 'SN', 'MP', 'MP'], 'R4', 0.8, 'Virginica',  
'Virginica', 'Acierto')  
([7.4, 2.8, 6.1, 1.9], ['HP', 'SN', 'HP', 'MP'], 'R4', 0.1, 'Virginica',  
'Virginica', 'Acierto')  
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([7.3, 2.9, 6.3, 1.8], ['HP', 'SN', 'HP', 'MP'], '-', '-', 'Virginica',  
'-', 'No clasificado')  
([5.7, 2.5, 5.0, 2.0], ['SN', 'MN', 'SP', 'MP'], 'R5', 0.3, 'Virginica',  
'Virginica', 'Acierto')  
([7.7, 2.8, 6.7, 2.0], ['HP', 'SN', 'HP', 'MP'], 'R5', 0.3, 'Virginica',  
'Virginica', 'Acierto')  
([6.4, 3.2, 5.3, 2.3], ['SP', 'Z', 'MP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R6', 1, 'Virginica',  
'Virginica', 'Acierto')  
([7.7, 3.8, 6.7, 2.2], ['HP', 'MP', 'HP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([7.7, 2.6, 6.9, 2.3], ['HP', 'MN', 'HP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.7, 3.3, 5.7, 2.1], ['SP', 'Z', 'MP', 'HP'], 'R5', 0.7, 'Virginica',  
'Virginica', 'Acierto')  
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R6', 0.3, 'Virginica',  
'Virginica', 'Acierto')  
([6.4, 2.8, 5.6, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([7.7, 3.0, 6.1, 2.3], ['HP', 'SN', 'HP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')
```

P. Acierto: 90.0%
P. No Clasificados: 3.3%
P. Fallo: 6.7%

--Algoritmo Elsevier Iteracion 3--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X3 is Z then Versicolor created with: 14 examples.
R2: if X2 is SN then Versicolor created with: 3 examples.
R3: if X0 is SP and X3 is SP then Versicolor created with: 2 examples.

Reglas Iris virginica: 2

R4: if X2 is MP then Virginica created with: 8 examples.
R5: if X0 is HP then Virginica created with: 3 examples.

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo', 'Prediccion', 'Resultado')
([5.7, 2.6, 3.5, 1.0], ['SN', 'MN', 'SN', 'SN'], 'R2', 0.6, 'Versicolor', 'Versicolor', 'Acierto')
([4.9, 2.5, 4.5, 1.7], ['HN', 'MN', 'SP', 'SP'], '-', '-', 'Virginica', '-', 'No clasificado')
([6.2, 3.4, 5.4, 2.3], ['Z', 'SP', 'MP', 'HP'], 'R4', 1.0, 'Virginica', 'Virginica', 'Acierto')
([7.7, 3.8, 6.7, 2.2], ['HP', 'MP', 'HP', 'HP'], 'R5', 1, 'Virginica', 'Virginica', 'Acierto')
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R1', 0.3, 'Versicolor', 'Versicolor', 'Acierto')
([5.5, 2.4, 3.7, 1.0], ['SN', 'HN', 'Z', 'SN'], 'R2', 0.3, 'Versicolor', 'Versicolor', 'Acierto')
([6.7, 2.5, 5.8, 1.8], ['SP', 'MN', 'MP', 'MP'], 'R4', 0.5, 'Virginica', 'Virginica', 'Acierto')
([7.7, 2.6, 6.9, 2.3], ['HP', 'MN', 'HP', 'HP'], 'R5', 1, 'Virginica', 'Virginica', 'Acierto')
([6.7, 3.3, 5.7, 2.1], ['SP', 'Z', 'MP', 'HP'], 'R4', 0.6, 'Virginica', 'Virginica', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R4', 0.4, 'Versicolor', 'Virginica', 'Fallo')
([6.3, 2.3, 4.4, 1.3], ['Z', 'HN', 'SP', 'Z'], 'R1', 1, 'Versicolor', 'Versicolor', 'Acierto')
([6.5, 3.0, 5.2, 2.0], ['SP', 'SN', 'MP', 'MP'], 'R4', 0.6, 'Virginica', 'Virginica', 'Acierto')
([6.0, 3.0, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], '-', '-', 'Virginica', '-', 'No clasificado')
([6.3, 2.8, 5.1, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R3', 0.4, 'Virginica', 'Versicolor', 'Fallo')
([5.6, 3.0, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',


```

'Versicolor', 'Acierto')
([5.5, 2.5, 4.0, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.8, 5.1, 2.4], ['SN', 'SN', 'SP', 'HP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.7, 4.9, 1.8], ['Z', 'MN', 'SP', 'MP'], 'R3', 0.3, 'Virginica',
'Versicolor', 'Fallo')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([5.6, 2.7, 4.2, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 2.5, 5.0, 1.9], ['Z', 'MN', 'SP', 'MP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.8, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 1, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([7.1, 3.0, 5.9, 2.1], ['MP', 'SN', 'HP', 'HP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.8, 3.0, 5.5, 2.1], ['MP', 'SN', 'MP', 'HP'], 'R4', 0.9, 'Virginica',
'Virginica', 'Acierto')
([5.7, 2.5, 5.0, 2.0], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.5, 1.8], ['SP', 'SN', 'MP', 'MP'], 'R4', 0.9, 'Virginica',
'Virginica', 'Acierto')
([6.0, 2.2, 5.0, 1.5], ['Z', 'HN', 'SP', 'SP'], 'R1', 0.3, 'Virginica',
'Versicolor', 'Fallo')

```

P. Acierto: 80.0%

P. No Clasificados: 6.7%

P. Fallo: 13.3%

--Algoritmo Elsevier Iteracion 4--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 9 examples.

R2: if X2 is SN then Versicolor created with: 4 examples.

R3: if X0 is SP and X2 is SP then Versicolor created with: 4 examples.

Reglas Iris virginica: 3

R4: if X2 is MP then Virginica created with: 7 examples.

R5: if X0 is HP then Virginica created with: 5 examples.

R6: if X0 is Z and X1 is SN and X2 is SP and X3 is SP then Virginica created with: 1 examples.

```

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
([5.9, 3.2, 4.8, 1.8], ['Z', 'Z', 'SP', 'MP'], '-', '-', 'Versicolor',
'-', 'No clasificado')
([6.4, 2.9, 4.3, 1.3], ['SP', 'SN', 'Z', 'Z'], 'R1', 0.5, 'Versicolor',
'Versicolor', 'Acierto')
([7.7, 2.8, 6.7, 2.0], ['HP', 'SN', 'HP', 'MP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R1', 0.4, 'Versicolor',
'Versicolor', 'Acierto')
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R3', 0.4, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 2.9, 4.5, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R6', 0.7, 'Versicolor',
'Virginica', 'Fallo')
([6.4, 3.1, 5.5, 1.8], ['SP', 'Z', 'MP', 'MP'], 'R4', 0.9, 'Virginica',
'Virginica', 'Acierto')
([5.7, 2.6, 3.5, 1.0], ['SN', 'MN', 'SN', 'SN'], 'R2', 0.6, 'Versicolor',
'Versicolor', 'Acierto')
([6.9, 3.1, 5.1, 2.3], ['MP', 'Z', 'SP', 'HP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R1', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 3.4, 4.5, 1.6], ['Z', 'SP', 'SP', 'SP'], 'R1', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.5, 4.0, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R2', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 2.9, 5.6, 1.8], ['Z', 'SN', 'MP', 'MP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([7.2, 3.6, 6.1, 2.5], ['MP', 'SP', 'HP', 'HP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([5.7, 3.0, 4.2, 1.2], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.8, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.2, 5.7, 2.3], ['MP', 'Z', 'MP', 'HP'], 'R4', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.1, 5.4, 2.1], ['MP', 'Z', 'MP', 'HP'], 'R4', 1.0, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([7.3, 2.9, 6.3, 1.8], ['HP', 'SN', 'HP', 'MP'], 'R5', 0.7, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.0, 5.2, 2.3], ['SP', 'SN', 'MP', 'HP'], 'R4', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.2, 5.1, 2.0], ['SP', 'Z', 'SP', 'MP'], 'R3', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([6.8, 3.0, 5.5, 2.1], ['MP', 'SN', 'MP', 'HP'], 'R4', 0.9, 'Virginica',

```

```

'Virginica', 'Acierto')
([5.7, 2.5, 5.0, 2.0], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.3, 5.7, 2.1], ['SP', 'Z', 'MP', 'HP'], 'R4', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.0, 3.0, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R6', 0.3, 'Virginica',
'Virginica', 'Acierto')

```

```

P. Acierto: 90.0%
P. No Clasificados: 3.3%
P. Fallo: 6.7%

```

--Algoritmo Elsevier Iteracion 5--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 8 examples.
R2: if X2 is SN then Versicolor created with: 4 examples.
R3: if X0 is SP and X2 is SP then Versicolor created with: 4 examples.

Reglas Iris virginica: 3

R4: if X0 is HP then Virginica created with: 5 examples.
R5: if X2 is MP then Virginica created with: 9 examples.
R6: if X0 is SN and X1 is MN and X2 is SP then Virginica created with: 1 examples.

```

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
([6.9, 3.1, 5.4, 2.1], ['MP', 'Z', 'MP', 'HP'], 'R5', 1.0, 'Virginica',
'Virginica', 'Acierto')
([6.1, 2.8, 4.7, 1.2], ['Z', 'SN', 'SP', 'Z'], '-', '-', 'Versicolor',
'-', 'No clasificado')
([5.7, 3.0, 4.2, 1.2], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.0, 5.2, 2.3], ['SP', 'SN', 'MP', 'HP'], 'R5', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.4, 2.9, 4.3, 1.3], ['SP', 'SN', 'Z', 'Z'], 'R1', 0.5, 'Versicolor',
'Versicolor', 'Acierto')
([7.3, 2.9, 6.3, 1.8], ['HP', 'SN', 'HP', 'MP'], 'R4', 0.7, 'Virginica',
'Virginica', 'Acierto')
([6.6, 3.0, 4.4, 1.4], ['SP', 'SN', 'SP', 'Z'], 'R3', 0.6, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R3', 0.6, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R1', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.4, 3.7, 1.0], ['SN', 'HN', 'Z', 'SN'], 'R1', 0.7, 'Versicolor',

```

```

'Versicolor', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R5', 0.4, 'Versicolor',
'Virginica', 'Fallo')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R6', 0.6, 'Versicolor',
'Virginica', 'Fallo')
([6.1, 3.0, 4.6, 1.4], ['Z', 'SN', 'SP', 'Z'], 'R1', 0.1, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.4, 2.7, 5.3, 1.9], ['SP', 'MN', 'MP', 'MP'], 'R5', 0.8, 'Virginica',
'Virginica', 'Acierto')
([5.1, 2.5, 3.0, 1.1], ['MN', 'MN', 'SN', 'SN'], 'R2', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([7.1, 3.0, 5.9, 2.1], ['MP', 'SN', 'HP', 'HP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.1, 5.6, 2.4], ['SP', 'Z', 'MP', 'HP'], 'R5', 0.8, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.3, 5.7, 2.5], ['SP', 'Z', 'MP', 'HP'], 'R5', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R5', 0.5, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.2, 5.1, 2.0], ['SP', 'Z', 'SP', 'MP'], 'R3', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([6.3, 2.5, 5.0, 1.9], ['Z', 'MN', 'SP', 'MP'], 'R3', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([5.8, 2.8, 5.1, 2.4], ['SN', 'SN', 'SP', 'HP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.2, 5.7, 2.3], ['MP', 'Z', 'MP', 'HP'], 'R5', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.7, 4.9, 1.8], ['Z', 'MN', 'SP', 'MP'], 'R3', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R3', 0.2, 'Virginica',
'Versicolor', 'Fallo')
([6.3, 2.8, 5.1, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R3', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R5', 0.8, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.2, 2.0], ['SP', 'SN', 'MP', 'MP'], 'R5', 0.6, 'Virginica',
'Virginica', 'Acierto')

```

P. Acierto: 73.3%

P. No Clasificados: 3.3%

P. Fallo: 23.3%

--Algoritmo Elsevier Iteracion 6--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 10 examples.

R2: if X2 is SN then Versicolor created with: 4 examples.

R3: if X0 is SP and X2 is SP then Versicolor created with: 4 examples.

Reglas Iris virginica: 3

R4: if X2 is MP then Virginica created with: 7 examples.

R5: if X0 is HP then Virginica created with: 5 examples.

R6: if X0 is SN and X1 is MN and X2 is SP then Virginica created with: 1 examples.

```
('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
([5.6, 2.9, 3.6, 1.3], ['SN', 'SN', 'SN', 'Z'], 'R1', 0.5, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 2.9, 5.6, 1.8], ['Z', 'SN', 'MP', 'MP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([6.4, 3.2, 5.3, 2.3], ['SP', 'Z', 'MP', 'HP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([5.6, 3.0, 4.5, 1.5], ['SN', 'SN', 'SP', 'SP'], 'R1', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([6.1, 2.8, 4.7, 1.2], ['Z', 'SN', 'SP', 'Z'], '-', '-', 'Versicolor',
'-', 'No clasificado')
([5.8, 2.7, 4.1, 1.0], ['SN', 'MN', 'Z', 'SN'], 'R1', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R6', 0.6, 'Versicolor',
'Virginica', 'Fallo')
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R3', 0.4, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R3', 0.6, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.7, 3.9, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([6.4, 3.1, 5.5, 1.8], ['SP', 'Z', 'MP', 'MP'], 'R4', 0.9, 'Virginica',
'Virginica', 'Acierto')
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R4', 0.5, 'Virginica',
'Virginica', 'Acierto')
([5.6, 2.8, 4.9, 2.0], ['SN', 'SN', 'SP', 'MP'], 'R6', 0.3, 'Virginica',
'Virginica', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R4', 0.4, 'Versicolor',
'Virginica', 'Fallo')
([6.0, 3.4, 4.5, 1.6], ['Z', 'SP', 'SP', 'SP'], 'R1', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([5.6, 3.0, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R2', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R4', 0.5, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.1, 5.1, 2.3], ['MP', 'Z', 'SP', 'HP'], 'R4', 0.4, 'Virginica',
```

```

'Virginica', 'Acierto')
([7.6, 3.0, 6.6, 2.1], ['HP', 'SN', 'HP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.2, 5.1, 2.0], ['SP', 'Z', 'SP', 'MP'], 'R3', 0.4, 'Virginica',
'Versicolor', 'Fallo')
([5.7, 2.5, 5.0, 2.0], ['SN', 'MN', 'SP', 'MP'], 'R6', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.3, 3.4, 5.6, 2.4], ['Z', 'SP', 'MP', 'HP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R3', 0.2, 'Virginica',
'Versicolor', 'Fallo')
([7.4, 2.8, 6.1, 1.9], ['HP', 'SN', 'HP', 'MP'], 'R5', 0.9, 'Virginica',
'Virginica', 'Acierto')
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')

```

P. Acierto: 83.3%

P. No Clasificados: 3.3%

P. Fallo: 13.3%

--Algoritmo Elsevier Iteracion 7--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 9 examples.

R2: if X2 is SN then Versicolor created with: 4 examples.

R3: if X0 is SP and X3 is SP then Versicolor created with: 2 examples.

Reglas Iris virginica: 2

R4: if X2 is MP then Virginica created with: 10 examples.

R5: if X0 is HP then Virginica created with: 4 examples.

```

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
([5.6, 3.0, 4.5, 1.5], ['SN', 'SN', 'SP', 'SP'], 'R1', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.0, 5.2, 2.3], ['SP', 'SN', 'MP', 'HP'], 'R4', 0.6, 'Virginica',
'Virginica', 'Acierto')
([5.9, 3.2, 4.8, 1.8], ['Z', 'Z', 'SP', 'MP'], '-', '-', 'Versicolor',
'-', 'No clasificado')
([6.1, 2.8, 4.0, 1.3], ['Z', 'SN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R3', 0.3, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 2.9, 4.5, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R1', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([6.1, 3.0, 4.9, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R4', 0.1, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.4, 'Virginica',

```

```

'Virginica', 'Acierto')
([5.7, 2.6, 3.5, 1.0], ['SN', 'MN', 'SN', 'SN'], 'R2', 0.6, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R4', 0.4, 'Versicolor',
'Virginica', 'Fallo')
([6.0, 3.4, 4.5, 1.6], ['Z', 'SP', 'SP', 'SP'], 'R1', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.5, 4.0, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([6.1, 3.0, 4.6, 1.4], ['Z', 'SN', 'SP', 'Z'], 'R1', 0.1, 'Versicolor',
'Versicolor', 'Acierto')
([6.5, 3.0, 5.2, 2.0], ['SP', 'SN', 'MP', 'MP'], 'R4', 0.6, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.8, 5.1, 2.4], ['SN', 'SN', 'SP', 'HP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R2', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([5.6, 2.7, 4.2, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.7, 3.3, 5.7, 2.5], ['SP', 'Z', 'MP', 'HP'], 'R4', 0.6, 'Virginica',
'Virginica', 'Acierto')
([5.7, 3.0, 4.2, 1.2], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([6.2, 2.9, 4.3, 1.3], ['Z', 'SN', 'Z', 'Z'], 'R1', 0.5, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 3.4, 5.6, 2.4], ['Z', 'SP', 'MP', 'HP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.8, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([7.2, 3.2, 6.0, 1.8], ['MP', 'Z', 'HP', 'MP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.8, 3.2, 5.9, 2.3], ['MP', 'Z', 'HP', 'HP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R4', 0.5, 'Virginica',
'Virginica', 'Acierto')
([6.4, 2.7, 5.3, 1.9], ['SP', 'MN', 'MP', 'MP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([7.7, 3.8, 6.7, 2.2], ['HP', 'MP', 'HP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.2, 2.8, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R3', 0.2, 'Virginica',
'Versicolor', 'Fallo')
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R4', 0.5, 'Virginica',
'Virginica', 'Acierto')

```

P. Acierto: 90.0%

P. No Clasificados: 3.3%

P. Fallo: 6.7%

--Algoritmo Elsevier Iteracion 8--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 9 examples.
R2: if X2 is SN then Versicolor created with: 4 examples.
R3: if X0 is SP and X3 is SP then Versicolor created with: 2 examples.

Reglas Iris virginica: 3

R4: if X2 is MP then Virginica created with: 9 examples.
R5: if X3 is HP then Virginica created with: 7 examples.
R6: if X0 is Z and X1 is MN then Virginica created with: 1 examples.

```
('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',  
'Prediccion', 'Resultado')  
([6.1, 2.9, 4.7, 1.4], ['Z', 'SN', 'SP', 'Z'], '-', '-', 'Versicolor',  
'-', 'No clasificado')  
([6.2, 2.2, 4.5, 1.5], ['Z', 'HN', 'SP', 'SP'], 'R1', 0.2, 'Versicolor',  
'Versicolor', 'Acierto')  
([5.6, 2.5, 3.9, 1.1], ['SN', 'MN', 'Z', 'SN'], 'R1', 0.9, 'Versicolor',  
'Versicolor', 'Acierto')  
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R2', 0.9, 'Versicolor',  
'Versicolor', 'Acierto')  
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R4', 0.5, 'Virginica',  
'Virginica', 'Acierto')  
([6.3, 2.5, 4.9, 1.5], ['Z', 'MN', 'SP', 'SP'], 'R6', 0.6, 'Versicolor',  
'Virginica', 'Fallo')  
([7.6, 3.0, 6.6, 2.1], ['HP', 'SN', 'HP', 'HP'], 'R5', 0.7, 'Virginica',  
'Virginica', 'Acierto')  
([6.4, 2.9, 4.3, 1.3], ['SP', 'SN', 'Z', 'Z'], 'R1', 0.5, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.3, 3.3, 6.0, 2.5], ['Z', 'Z', 'HP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([6.6, 3.0, 4.4, 1.4], ['SP', 'SN', 'SP', 'Z'], 'R1', 0.4, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R3', 0.3, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R3', 0.7, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.4, 2.8, 5.6, 2.1], ['SP', 'SN', 'MP', 'HP'], 'R4', 0.8, 'Virginica',  
'Virginica', 'Acierto')  
([6.0, 2.7, 5.1, 1.6], ['Z', 'MN', 'SP', 'SP'], 'R6', 0.7, 'Versicolor',  
'Virginica', 'Fallo')  
([6.7, 3.1, 4.7, 1.5], ['SP', 'Z', 'SP', 'SP'], 'R3', 0.7, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.3, 2.3, 4.4, 1.3], ['Z', 'HN', 'SP', 'Z'], 'R1', 0.4, 'Versicolor',  
'Versicolor', 'Acierto')  
([6.9, 3.2, 5.7, 2.3], ['MP', 'Z', 'MP', 'HP'], 'R5', 1, 'Virginica',  
'Virginica', 'Acierto')  
([5.5, 2.5, 4.0, 1.3], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor',  
'Versicolor', 'Acierto')  
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R1', 0.4, 'Versicolor',  
'Versicolor', 'Acierto')  
([5.1, 2.5, 3.0, 1.1], ['MN', 'MN', 'SN', 'SN'], 'R2', 0.7, 'Versicolor',  
'Versicolor', 'Acierto')
```



```

([6.5, 3.0, 5.8, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.0, 2.2, 5.0, 1.5], ['Z', 'HN', 'SP', 'SP'], 'R4', 0.2, 'Virginica',
'Virginica', 'Acierto')
([4.9, 2.5, 4.5, 1.7], ['HN', 'MN', 'SP', 'SP'], 'R1', 0.2, 'Virginica',
'Versicolor', 'Fallo')
([7.3, 2.9, 6.3, 1.8], ['HP', 'SN', 'HP', 'MP'], '-', '-', 'Virginica',
'-', 'No clasificado')
([7.2, 3.6, 6.1, 2.5], ['MP', 'SP', 'HP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.4, 2.7, 5.3, 1.9], ['SP', 'MN', 'MP', 'MP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([5.8, 2.7, 5.1, 1.9], ['SN', 'MN', 'SP', 'MP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([7.7, 2.8, 6.7, 2.0], ['HP', 'SN', 'HP', 'MP'], 'R5', 0.3, 'Virginica',
'Virginica', 'Acierto')
([6.4, 2.8, 5.6, 2.2], ['SP', 'SN', 'MP', 'HP'], 'R5', 1, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.1, 5.4, 2.1], ['MP', 'Z', 'MP', 'HP'], 'R4', 1.0, 'Virginica',
'Virginica', 'Acierto')

```

P. Acierto: 83.3%

P. No Clasificados: 6.7%

P. Fallo: 10.0%

--Algoritmo Elsevier Iteracion 9--

Reglas Iris setosa: 2

R0: if X1 is SP then Setosa created with: 4 examples.

R1: if X2 is HN then Setosa created with: 9 examples.

Reglas Iris versicolor: 3

R2: if X2 is Z then Versicolor created with: 10 examples.

R3: if X2 is SN then Versicolor created with: 5 examples.

R4: if X1 is MN and X3 is SP then Versicolor created with: 1 examples.

Reglas Iris virginica: 3

R5: if X2 is MP then Virginica created with: 6 examples.

R6: if X0 is HP then Virginica created with: 3 examples.

R7: if X0 is SN and X1 is MN and X2 is SP then Virginica created with: 1 examples.

```

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo',
'Prediccion', 'Resultado')
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R4', 0.3, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 3.4, 5.6, 2.4], ['Z', 'SP', 'MP', 'HP'], 'R5', 0.8, 'Virginica',
'Virginica', 'Acierto')
([7.4, 2.8, 6.1, 1.9], ['HP', 'SN', 'HP', 'MP'], 'R6', 0.9, 'Virginica',
'Virginica', 'Acierto')

```

```

([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R5', 0.2, 'Versicolor',
'Virginica', 'Fallo')
([6.0, 2.9, 4.5, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R2', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R2', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([5.4, 3.0, 4.5, 1.5], ['MN', 'SN', 'SP', 'SP'], 'R2', 0.2, 'Versicolor',
'Versicolor', 'Acierto')
([6.1, 2.6, 5.6, 1.4], ['Z', 'MN', 'MP', 'Z'], 'R5', 0.8, 'Virginica',
'Virginica', 'Acierto')
([6.0, 3.4, 4.5, 1.6], ['Z', 'SP', 'SP', 'SP'], 'R0', 0.7, 'Versicolor',
'Setosa', 'Fallo')
([7.7, 3.0, 6.1, 2.3], ['HP', 'SN', 'HP', 'HP'], 'R6', 1, 'Virginica',
'Virginica', 'Acierto')
([6.7, 3.1, 4.7, 1.5], ['SP', 'Z', 'SP', 'SP'], '-', '-', 'Versicolor',
'-', 'No clasificado')
([5.0, 2.3, 3.3, 1.0], ['MN', 'HN', 'SN', 'SN'], 'R3', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 2.3, 4.4, 1.3], ['Z', 'HN', 'SP', 'Z'], 'R2', 0.4, 'Versicolor',
'Versicolor', 'Acierto')
([6.0, 3.0, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], '-', '-', 'Virginica',
'-', 'No clasificado')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R2', 0.9, 'Versicolor',
'Versicolor', 'Acierto')
([5.5, 2.6, 4.4, 1.2], ['SN', 'MN', 'SP', 'Z'], 'R7', 0.6, 'Versicolor',
'Virginica', 'Fallo')
([6.2, 2.9, 4.3, 1.3], ['Z', 'SN', 'Z', 'Z'], 'R2', 0.5, 'Versicolor',
'Versicolor', 'Acierto')
([7.1, 3.0, 5.9, 2.1], ['MP', 'SN', 'HP', 'HP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.9, 5.6, 1.8], ['Z', 'SN', 'MP', 'MP'], 'R5', 0.8, 'Virginica',
'Virginica', 'Acierto')
([7.2, 3.6, 6.1, 2.5], ['MP', 'SP', 'HP', 'HP'], 'R0', 0.7, 'Virginica',
'Setosa', 'Fallo')
([7.6, 3.0, 6.6, 2.1], ['HP', 'SN', 'HP', 'HP'], 'R6', 1, 'Virginica',
'Virginica', 'Acierto')
([4.9, 2.5, 4.5, 1.7], ['HN', 'MN', 'SP', 'SP'], 'R4', 0.7, 'Virginica',
'Versicolor', 'Fallo')
([7.2, 3.0, 5.8, 1.6], ['MP', 'SN', 'MP', 'SP'], 'R5', 0.5, 'Virginica',
'Virginica', 'Acierto')
([6.8, 3.0, 5.5, 2.1], ['MP', 'SN', 'MP', 'HP'], 'R5', 0.9, 'Virginica',
'Virginica', 'Acierto')
([6.2, 3.4, 5.4, 2.3], ['Z', 'SP', 'MP', 'HP'], 'R5', 1.0, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.1, 5.1, 2.3], ['MP', 'Z', 'SP', 'HP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.4, 3.2, 5.3, 2.3], ['SP', 'Z', 'MP', 'HP'], 'R5', 0.8, 'Virginica',
'Virginica', 'Acierto')
([7.7, 2.6, 6.9, 2.3], ['HP', 'MN', 'HP', 'HP'], 'R6', 1, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.7, 4.9, 1.8], ['Z', 'MN', 'SP', 'MP'], 'R4', 0.3, 'Virginica',
'Versicolor', 'Fallo')
([6.3, 2.8, 5.1, 1.5], ['Z', 'SN', 'SP', 'SP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')

```

P. Acierto: 73.3%
P. No Clasificados: 6.7%
P. Fallo: 20.0%

--Algoritmo Elsevier Iteracion 10--

Reglas Iris setosa: 1

R0: if X2 is HN then Setosa created with: 13 examples.

Reglas Iris versicolor: 3

R1: if X2 is Z then Versicolor created with: 9 examples.

R2: if X2 is SN then Versicolor created with: 4 examples.

R3: if X0 is SP and X3 is SP then Versicolor created with: 2 examples.

Reglas Iris virginica: 2

R4: if X2 is MP then Virginica created with: 9 examples.

R5: if X0 is HP then Virginica created with: 5 examples.

('Ejemplo', 'Ejemplo fuzzy', 'Nº Regla', 'Activacion', 'Clase ejemplo', 'Prediccion', 'Resultado')
([6.1, 3.0, 4.6, 1.4], ['Z', 'SN', 'SP', 'Z'], 'R1', 0.1, 'Versicolor', 'Versicolor', 'Acierto')
([6.1, 2.8, 4.7, 1.2], ['Z', 'SN', 'SP', 'Z'], '-', '-', 'Versicolor', '-', 'No clasificado')
([6.8, 2.8, 4.8, 1.4], ['MP', 'SN', 'SP', 'Z'], 'R3', 0.3, 'Versicolor', 'Versicolor', 'Acierto')
([6.7, 3.0, 5.0, 1.7], ['SP', 'SN', 'SP', 'SP'], 'R3', 0.7, 'Versicolor', 'Versicolor', 'Acierto')
([6.4, 2.7, 5.3, 1.9], ['SP', 'MN', 'MP', 'MP'], 'R4', 0.8, 'Virginica', 'Virginica', 'Acierto')
([5.7, 2.6, 3.5, 1.0], ['SN', 'MN', 'SN', 'SN'], 'R2', 0.6, 'Versicolor', 'Versicolor', 'Acierto')
([7.7, 2.8, 6.7, 2.0], ['HP', 'SN', 'HP', 'MP'], 'R5', 1, 'Virginica', 'Virginica', 'Acierto')
([5.5, 2.4, 3.8, 1.1], ['SN', 'HN', 'Z', 'SN'], 'R1', 0.8, 'Versicolor', 'Versicolor', 'Acierto')
([5.5, 2.4, 3.7, 1.0], ['SN', 'HN', 'Z', 'SN'], 'R1', 0.7, 'Versicolor', 'Versicolor', 'Acierto')
([5.8, 2.7, 3.9, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor', 'Versicolor', 'Acierto')
([6.0, 3.0, 4.8, 1.8], ['Z', 'SN', 'SP', 'MP'], '-', '-', 'Virginica', '-', 'No clasificado')
([5.4, 3.0, 4.5, 1.5], ['MN', 'SN', 'SP', 'SP'], 'R1', 0.2, 'Versicolor', 'Versicolor', 'Acierto')
([7.4, 2.8, 6.1, 1.9], ['HP', 'SN', 'HP', 'MP'], 'R5', 0.9, 'Virginica', 'Virginica', 'Acierto')
([6.0, 3.4, 4.5, 1.6], ['Z', 'SP', 'SP', 'SP'], 'R1', 0.2, 'Versicolor', 'Versicolor', 'Acierto')
([6.3, 2.3, 4.4, 1.3], ['Z', 'HN', 'SP', 'Z'], 'R1', 0.4, 'Versicolor', 'Versicolor', 'Acierto')
([5.8, 2.6, 4.0, 1.2], ['SN', 'MN', 'Z', 'Z'], 'R1', 0.9, 'Versicolor', 'Versicolor', 'Acierto')

```

'Versicolor', 'Acierto')
([5.7, 3.0, 4.2, 1.2], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.9, 4.2, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.7, 'Versicolor',
'Versicolor', 'Acierto')
([5.7, 2.8, 4.1, 1.3], ['SN', 'SN', 'Z', 'Z'], 'R1', 0.8, 'Versicolor',
'Versicolor', 'Acierto')
([6.3, 2.9, 5.6, 1.8], ['Z', 'SN', 'MP', 'MP'], 'R4', 0.8, 'Virginica',
'Virginica', 'Acierto')
([4.9, 2.5, 4.5, 1.7], ['HN', 'MN', 'SP', 'SP'], 'R1', 0.2, 'Virginica',
'Versicolor', 'Fallo')
([7.2, 3.6, 6.1, 2.5], ['MP', 'SP', 'HP', 'HP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([6.5, 3.0, 5.5, 1.8], ['SP', 'SN', 'MP', 'MP'], 'R4', 0.9, 'Virginica',
'Virginica', 'Acierto')
([6.4, 3.1, 5.5, 1.8], ['SP', 'Z', 'MP', 'MP'], 'R4', 0.9, 'Virginica',
'Virginica', 'Acierto')
([6.9, 3.2, 5.7, 2.3], ['MP', 'Z', 'MP', 'HP'], 'R4', 0.6, 'Virginica',
'Virginica', 'Acierto')
([6.8, 3.2, 5.9, 2.3], ['MP', 'Z', 'HP', 'HP'], 'R4', 0.4, 'Virginica',
'Virginica', 'Acierto')
([7.2, 3.2, 6.0, 1.8], ['MP', 'Z', 'HP', 'MP'], 'R5', 0.4, 'Virginica',
'Virginica', 'Acierto')
([5.6, 2.8, 4.9, 2.0], ['SN', 'SN', 'SP', 'MP'], 'R4', 0.1, 'Virginica',
'Virginica', 'Acierto')
([6.1, 3.0, 4.9, 1.8], ['Z', 'SN', 'SP', 'MP'], 'R4', 0.1, 'Virginica',
'Virginica', 'Acierto')
([6.3, 2.7, 4.9, 1.8], ['Z', 'MN', 'SP', 'MP'], 'R3', 0.3, 'Virginica',
'Versicolor', 'Fallo')

```

P. Acierto: 86.7%

P. No Clasificados: 6.7%

P. Fallo: 6.7%

--- Informe de resultados del algoritmo --- Elsevier

Numero total de ejemplos: 150

Numero de clases: 3

Numero de variables: 4

Porcentaje de ejemplos usados para entrenamiento: 0.8%

Porcentaje de ejemplos usados para test: 0.2%

Numero total de ejemplos entrenamiento: 120

Numero total de ejemplos test: 30

Numero total de ejecuciones: 10

Tiempo de ejecucion del algoritmo: 0.3s

----Resumen pruebas algoritmo----

author2

Media de P. Acierto: 83.7%

Media de P. No Clasificados: 4.7%

Media de P. No Clasificados: 11.7%

Prueba	R. Setosa	R. Versi	R. Virgi	Total	Acierto	NC	Fallo
1	1	3	2	6	86.7%	3.3%	10.0%

2	1	3	3	7	90.0%	3.3%	6.7%
3	1	3	2	6	80.0%	6.7%	13.3%
4	1	3	3	7	90.0%	3.3%	6.7%
5	1	3	3	7	73.3%	3.3%	23.3%
6	1	3	3	7	83.3%	3.3%	13.3%
7	1	3	2	6	90.0%	3.3%	6.7%
8	1	3	3	7	83.3%	6.7%	10.0%
9	2	3	3	8	73.3%	6.7%	20.0%
10	1	3	2	6	86.7%	6.7%	6.7%

Amplify algorithm								Elsevier algorithm						
P	NRSe	NRVe	NRVi	Tot	Acc	NC	E	NRSe	NRVe	NRVi	Tot	Acc	NC	E
1	1	2	6	9	90.0%	0.0%	10.0%	1	3	2	6	86.7%	3.3%	10.0%
2	1	6	7	14	86.7%	0.0%	13.3%	1	3	3	7	90.0%	3.3%	6.7%
3	1	3	4	8	86.7%	0.0%	13.3%	1	3	2	6	80.0%	6.7%	13.3%
4	1	6	5	12	93.3%	0.0%	6.7%	1	3	3	7	90.0%	3.3%	6.7%
5	1	5	6	12	90.0%	0.0%	10.0%	1	3	3	7	73.3%	3.3%	23.3%
6	1	8	6	15	86.7%	0.0%	13.3%	1	3	3	7	83.3%	3.3%	13.3%
7	1	6	5	12	90.0%	0.0%	10.0%	1	3	2	6	90.0%	3.3%	6.7%
8	1	6	5	12	90.0%	0.0%	10.0%	1	3	3	7	83.3%	6.7%	10.0%
9	1	4	5	10	86.7%	0.0%	13.3%	2	3	3	8	73.3%	6.7%	20.0%
10	1	7	6	14	96.7%	0.0%	3.3%	1	3	2	6	86.7%	6.7%	6.7%

P: Prueba

NRSe: Numero de Reglas Setosa

NRVe: Numero de Reglas Versicolor

NRSe: Numero de Reglas Virginica

Tot: Total

Acc: Porcentaje de Acierto

NC: Porcentaje de No Clasificados

F: Porcentaje de Fallo