

Nama : Ririrs Agriela Savitri
NIM : L200170029
Kelas : B

MODUL 11

INDUKSI DAN ATURAN ASOSIASI

Langkah-langkah Praktikum

1. Induksi Aturan Data Cuaca Rule Model (Rule Induction)

The screenshot shows a software window titled "RuleModel (Rule Induction)". It has a sidebar with "Description" and "Annotations" sections. The main area displays the following rules and their performance:

```
if Kelembapan_Udara ≤ 82.500 then YA (1 / 6)
if Cuaca = Cerah then TIDAK (3 / 0)
if Cuaca = Mendung then YA (0 / 2)
if Suhu ≤ 70.500 then YA (0 / 1)
else TIDAK (0 / 0)
```

correct: 12 out of 13 training examples.

Hasil Performance Vector



The screenshot shows a software window titled "PerformanceVector (Performance)". It has a sidebar with "Performance", "Description", and "Annotations" sections. The main area displays a table of performance metrics. The table has columns for "true TIDAK", "true YA", and "class precision". The rows are "pred. TIDAK", "pred. YA", and "class recall".

	true TIDAK	true YA	class precision
pred. TIDAK	2	1	66.67%
pred. YA	3	8	72.73%
class recall	40.00%	88.89%	

2. Aturan Asosiasi Data Cuaca

Frequent Item Set (FP – Growth)

<div>  Data </div> <div>  Annotations </div>	No. of Sets: 26 Total Max. Size: 4	Size	Support	Item 1	Item 2	Item 3	Item 4
Min. Size: <input type="text" value="1"/>	1	0.500	Kelembapan_Ud...				
Max. Size: <input type="text" value="4"/>	1	0.429	Berangin				
Contains Item: <input type="text"/>	1	0.429	Suhu				
<input type="button" value="Update View"/>	1	0.357	Cuaca = Cerah				
	1	0.357	Cuaca = Hujan				
	1	0.286	Cuaca = Mendung				
	2	0.214	Kelembapan_Ud...	Berangin			
	2	0.214	Kelembapan_Ud...	Suhu			
	2	0.214	Kelembapan_Ud...	Cuaca = Cerah			
	2	0.143	Kelembapan_Ud...	Cuaca = Hujan			
	2	0.143	Kelembapan_Ud...	Cuaca = Mendung			
	2	0.143	Berangin	Suhu			
	2	0.143	Berangin	Cuaca = Cerah			
	2	0.143	Berangin	Cuaca = Hujan			
	2	0.143	Berangin	Cuaca = Mendung			

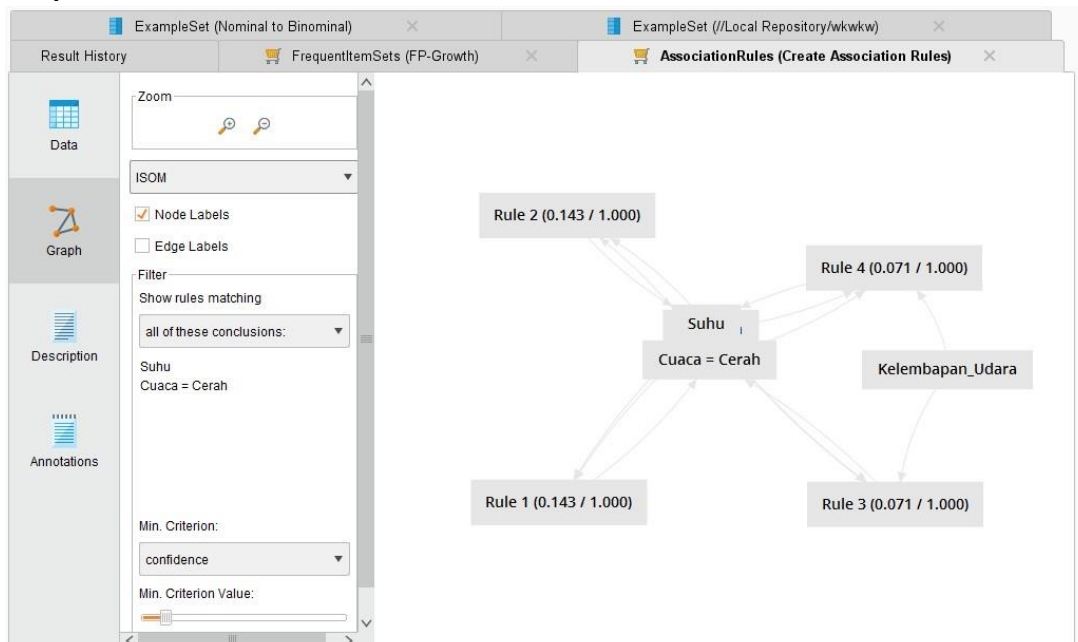
<div>  Data </div> <div>  Annotations </div>	No. of Sets: 26 Total Max. Size: 4	Size	Support	Item 1	Item 2	Item 3	Item 4
Min. Size: <input type="text" value="1"/>	2	0.143	Berangin	Suhu			
Max. Size: <input type="text" value="4"/>	2	0.143	Berangin	Cuaca = Cerah			
Contains Item: <input type="text"/>	2	0.143	Berangin	Cuaca = Hujan			
<input type="button" value="Update View"/>	2	0.143	Berangin	Cuaca = Mendung			
	2	0.214	Suhu	Cuaca = Cerah			
	2	0.071	Suhu	Cuaca = Hujan			
	2	0.143	Suhu	Cuaca = Mendung			
	3	0.071	Kelembapan_Ud...	Berangin	Suhu		
	3	0.071	Kelembapan_Ud...	Berangin	Cuaca = Cerah		
	3	0.071	Kelembapan_Ud...	Berangin	Cuaca = Hujan		
	3	0.071	Kelembapan_Ud...	Berangin	Cuaca = Mendung		
	3	0.143	Kelembapan_Ud...	Suhu	Cuaca = Cerah		
	3	0.071	Kelembapan_Ud...	Suhu	Cuaca = Mendung		
	3	0.143	Berangin	Suhu	Cuaca = Cerah		
	4	0.071	Kelembapan_Ud...	Berangin	Suhu	Cuaca = Cerah	

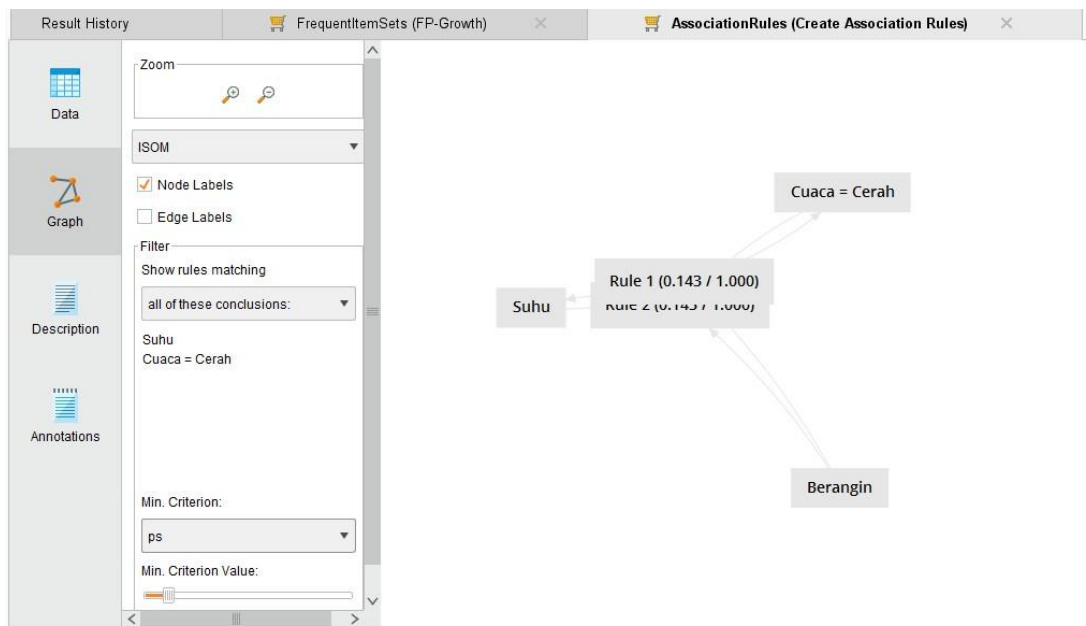
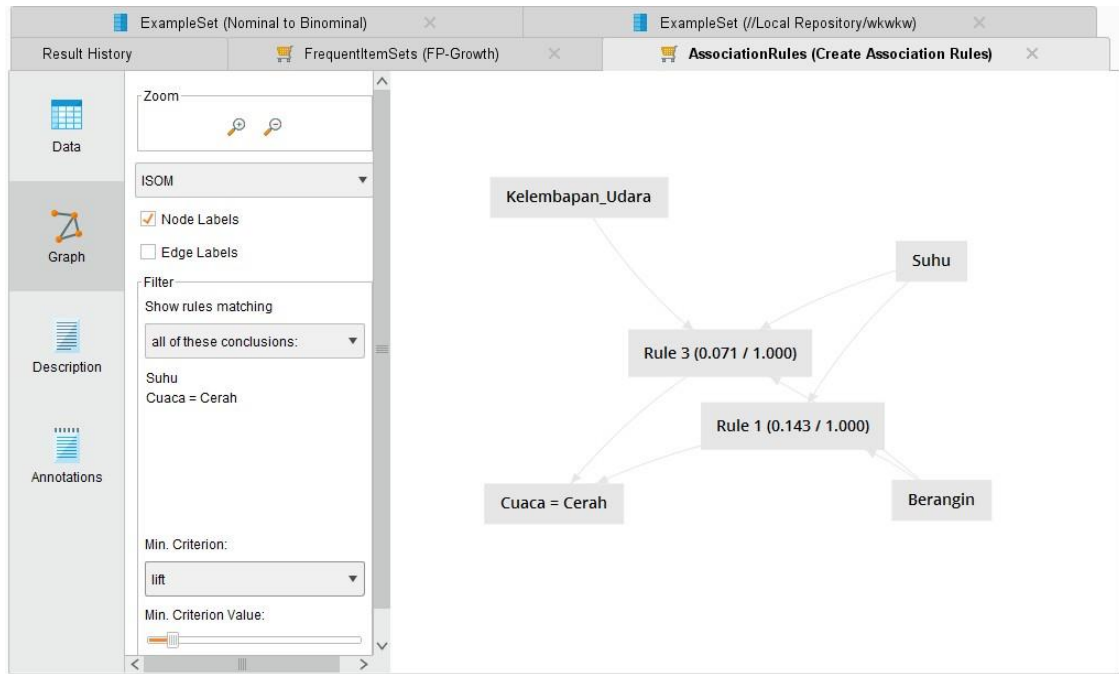
Association Rules

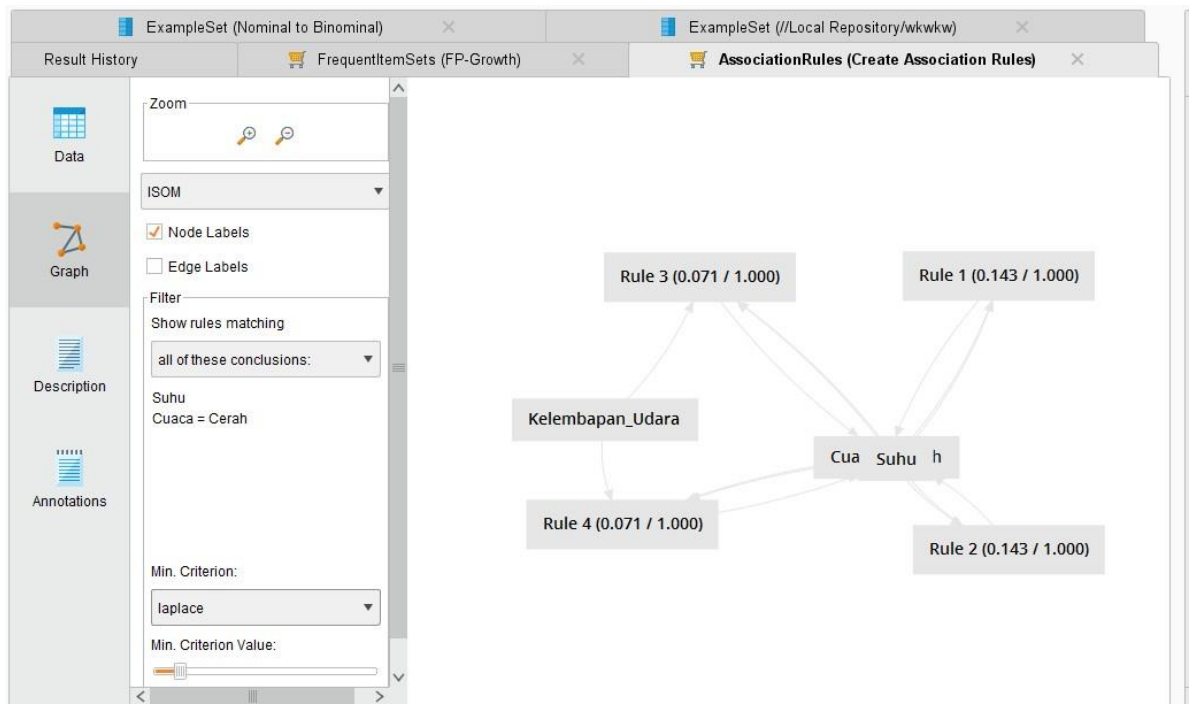
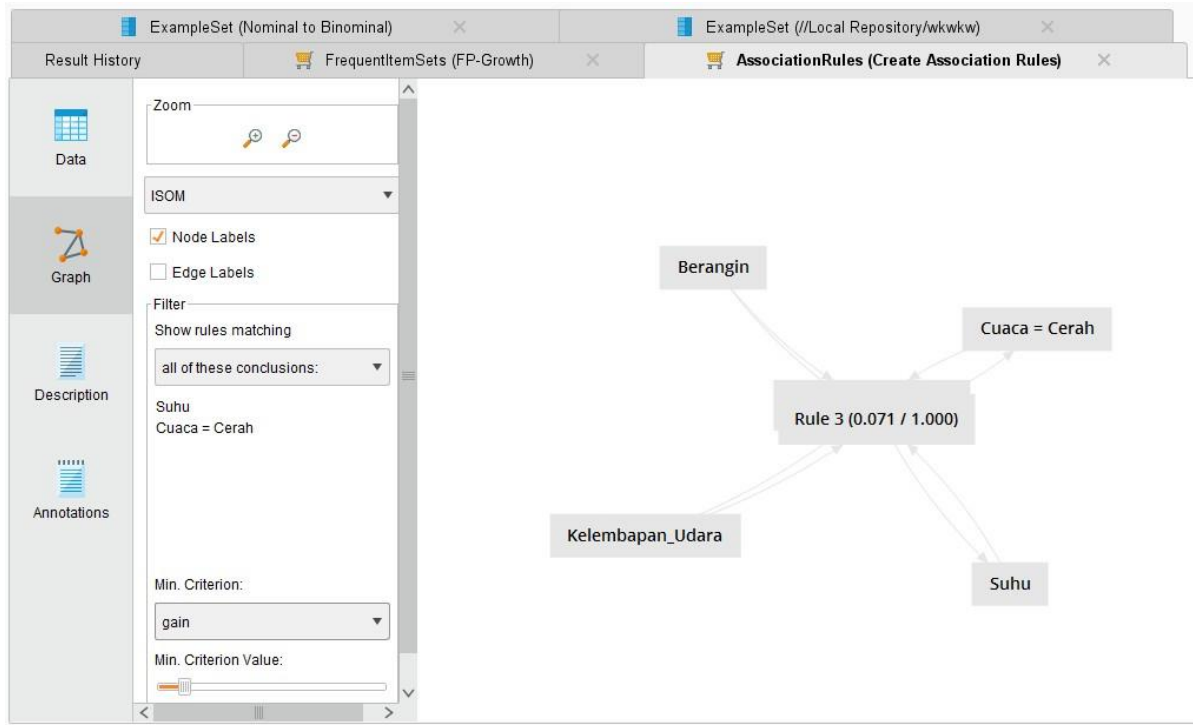
The screenshot shows the 'AssociationRules (Create Association Rules)' window. On the left, there is a sidebar with icons for Data, Graph, Description, and Annotations. The 'Data' section is active, showing 'Show rules matching' with a dropdown set to 'any of these conclusions:'. Below this, the text 'Suhu' and 'Cuaca = Cerah' is displayed. Further down, 'Min. Criterion:' is set to 'confidence' and 'Min. Criterion Value:' is shown with a slider. The main area contains a table with 4 rows of association rules.

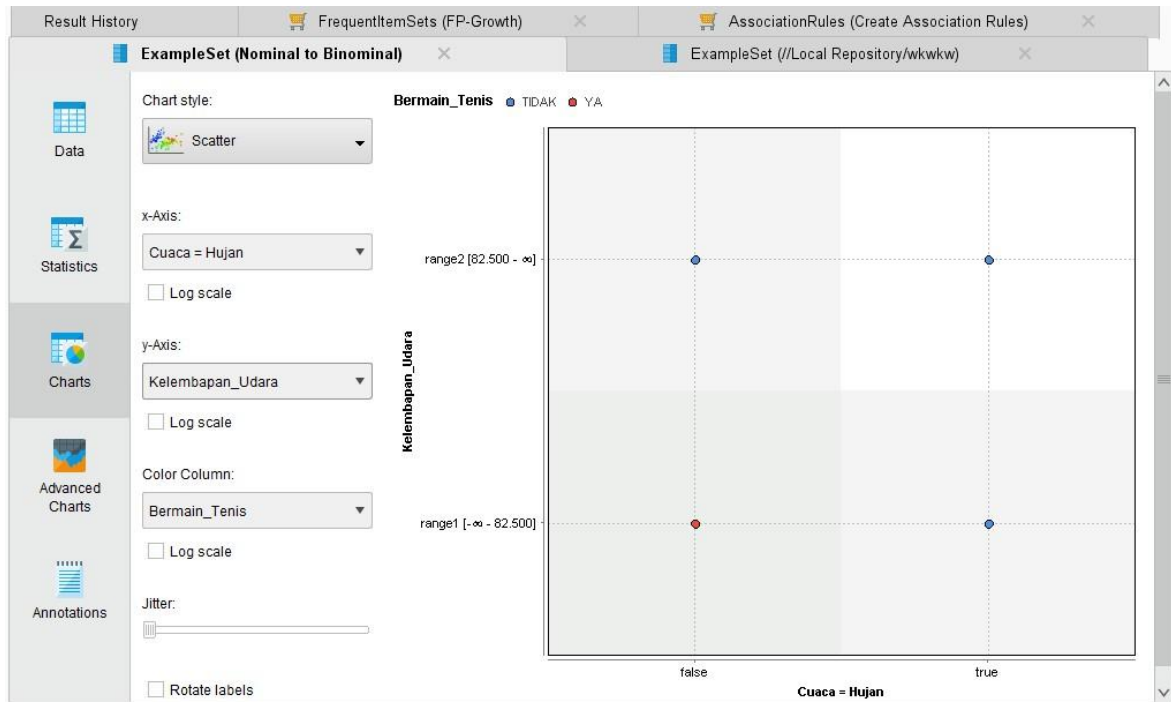
No.	Premises	Conclusion
1	Berangin, Suhu	Cuaca = Cerah
2	Berangin, Cuaca = Cerah	Suhu
3	Kelembapan_Udara, Berangin, Suhu	Cuaca = Cerah
4	Kelembapan_Udara, Berangin, Cuaca = Cerah	Suhu

Graph View









TUGAS

RuleModel (Rule Induction)

RuleModel

if Rerata_SKS > 18.500 then TEPAT (2 / 10)
 if Gender = PRIA then TERLAMBAT (4 / 0)
 if Jurusan_SMA = IPA then TEPAT (0 / 2)
 if Jurusan_SMA = IPS then TERLAMBAT (1 / 0)
 else TEPAT (0 / 0)

correct: 17 out of 19 training examples.

PerformanceVector (Performance)

Table View Plot View

accuracy: 65.00% +/- 32.02% (micro average: 65.00%)

	true TERLAMBAT	true TEPAT	class precision
pred. TERLAMBAT	4	4	50.00%
pred. TEPAT	3	9	75.00%
class recall	57.14%	69.23%	

Result History

Data

Annotations

No. of Sets: 85

Total Max. Size: 5

Min. Size:

1

Max. Size:

5

Contains Item:

Update View

Size	Support	Item 1	Item 2	Item 3	Item 4	Item 5
1	0.750	Gender				
1	0.500	Jurusan_SMA ...				
1	0.400	Rerata_SKS =...				
1	0.350	Rerata_SKS =...				
1	0.300	Asal_Sekolah				
1	0.300	Jurusan_SMA ...				
1	0.250	Asisten				
1	0.250	Rerata_SKS =...				
1	0.200	Jurusan_SMA ...				
2	0.350	Gender	Jurusan_SMA ...			
2	0.200	Gender	Rerata_SKS =...			
2	0.300	Gender	Rerata_SKS =...			
2	0.250	Gender	Asal_Sekolah			
2	0.250	Gender	Jurusan_SMA ...			
2	0.200	Gender	Asisten			

ExampleSet (Nominal to Binominal)

ExampleSet (/Local Repository/wkwkw)

Result History

FrequentItemSets (FP-Growth)

AssociationRules (Create Association Rules)

Data

Annotations

No. of Sets: 85

Total Max. Size: 5

Min. Size:

Max. Size:

Contains Item:

Update View

Size	Support	Item 1	Item 2	Item 3	Item 4	Item 5
2	0.350	Gender	Jurusan_SMA ...			
2	0.200	Gender	Rerata_SKS =...			
2	0.300	Gender	Rerata_SKS =...			
2	0.250	Gender	Asal_Sekolah			
2	0.250	Gender	Jurusan_SMA ...			
2	0.200	Gender	Asisten			
2	0.250	Gender	Rerata_SKS =...			
2	0.150	Gender	Jurusan_SMA ...			
2	0.200	Jurusan_SMA ...	Rerata_SKS =...			
2	0.200	Jurusan_SMA ...	Rerata_SKS =...			
2	0.150	Jurusan_SMA ...	Asal_Sekolah			
2	0.200	Jurusan_SMA ...	Asisten			
2	0.100	Jurusan_SMA ...	Rerata_SKS =...			
2	0.150	Rerata_SKS =...	Asal_Sekolah			
2	0.100	Rerata_SKS =...	Jurusan_SMA ...			
2	0.050	Rerata_SKS =...	Asisten			

ExampleSet (Nominal to Binominal)

ExampleSet (/Local Repository/wkwkw)

Result History

FrequentItemSets (FP-Growth)

AssociationRules (Create Association Rules)

Data

Annotations

No. of Sets: 10

Total Max. Size: 2

Min. Size:

Max. Size:

Contains Item:

Update View

Size	Support	Item 1	Item 2
1	0.750	Gender	
1	0.500	Jurusan_SMA = IPA	
1	0.300	Asal_Sekolah	
1	0.300	Jurusan_SMA = IPS	
1	0.250	Asisten	
1	0.250	Rerata_SKS	
2	0.350	Gender	Jurusan_SMA = IPA
2	0.250	Gender	Asal_Sekolah
2	0.250	Gender	Jurusan_SMA = IPS
2	0.250	Gender	Rerata_SKS

ExampleSet (Nominal to Binominal)

ExampleSet (/Local Repository/wkwkw)

Result History

FrequentItemSets (FP-Growth)

AssociationRules (Create Association Rules)

Data

Annotations

No. of Sets: 13

Total Max. Size: 2

Min. Size:

Max. Size:

Contains Item:

Show annotations of the data

Update View

Size	Support	Item 1	Item 2
1	0.750	Gender	
1	0.500	Jurusan_SMA = IPA	
1	0.400	Rerata_SKS = range1 [-∞ - 1...	
1	0.350	Rerata_SKS = range2 [18.50...	
1	0.300	Asal_Sekolah	
1	0.300	Jurusan_SMA = IPS	
1	0.250	Asisten	
1	0.250	Rerata_SKS = range3 [19.50...	
2	0.350	Gender	Jurusan_SMA = IPA
2	0.300	Gender	Rerata_SKS = range2 [18.50...
2	0.250	Gender	Asal_Sekolah
2	0.250	Gender	Jurusan_SMA = IPS
2	0.250	Gender	Rerata_SKS = range3 [19.50...

