Laporan Praktikum

DWDM

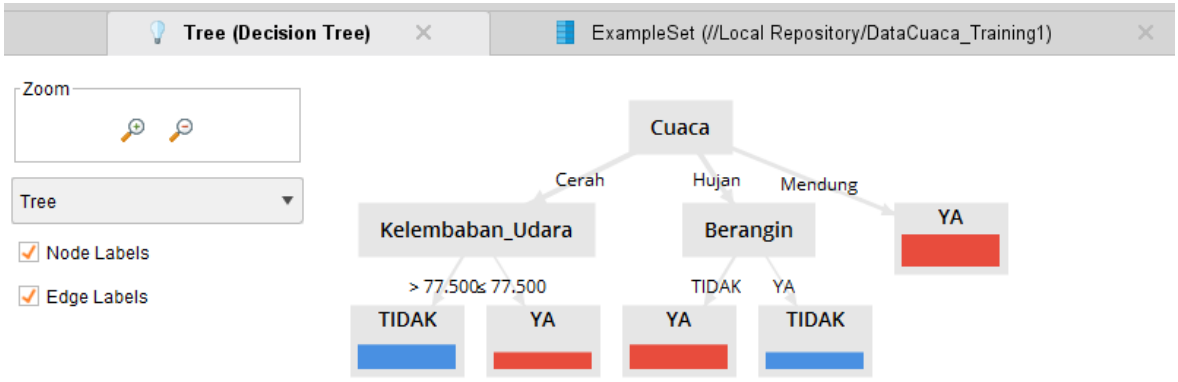
Modul 11

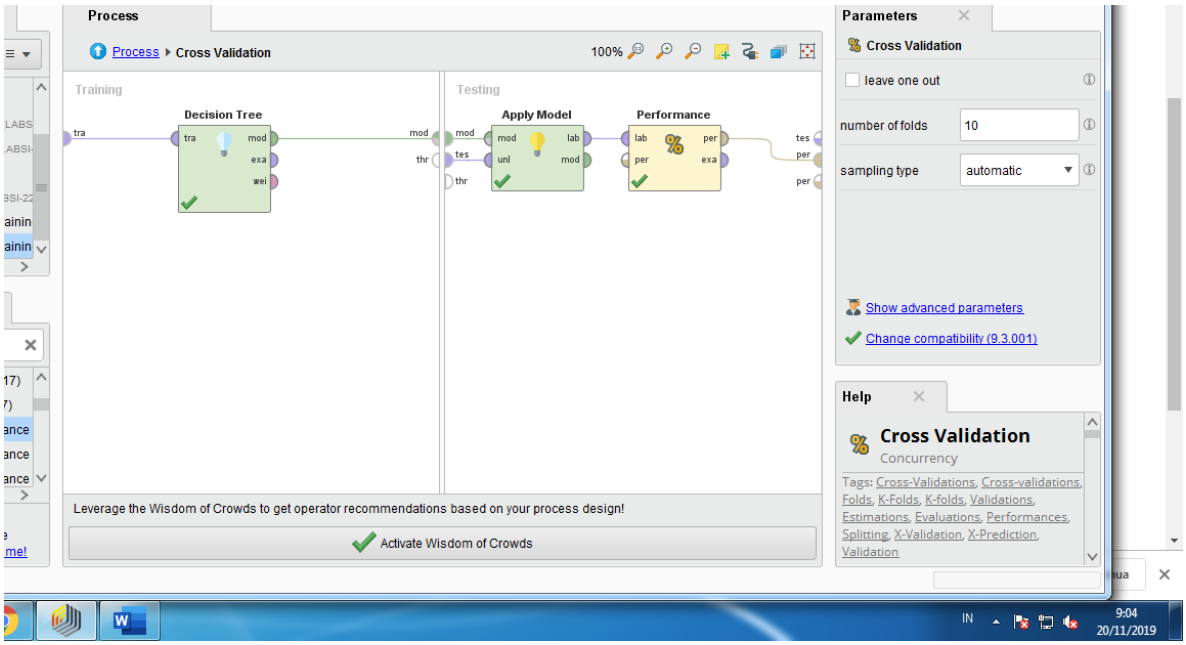
Nama : Bagus Nuril Anam

NIM : L200170006

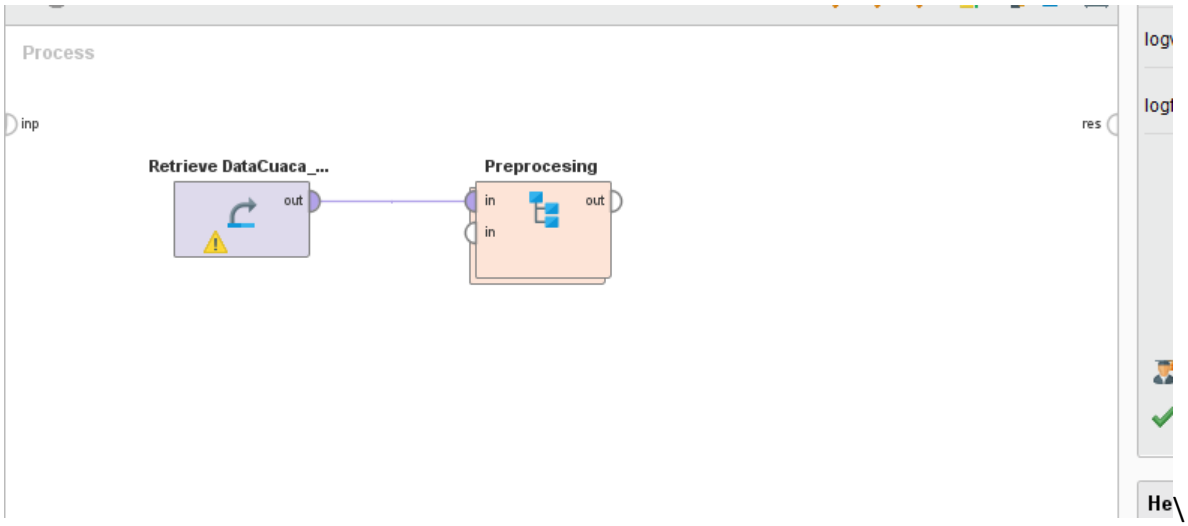
Kelas : A

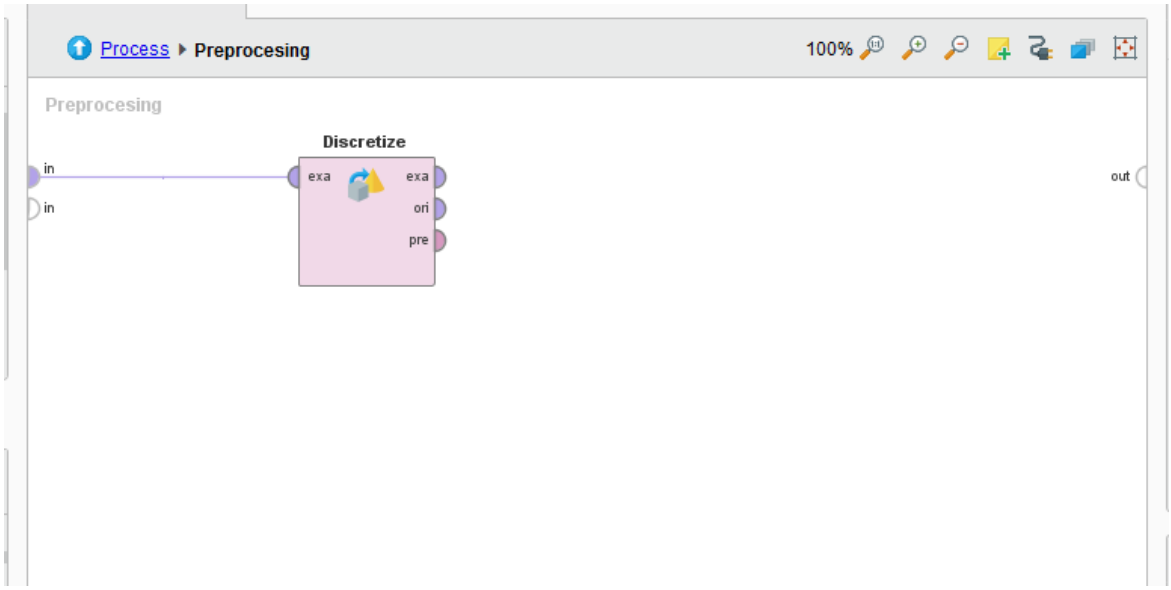
11.4.1

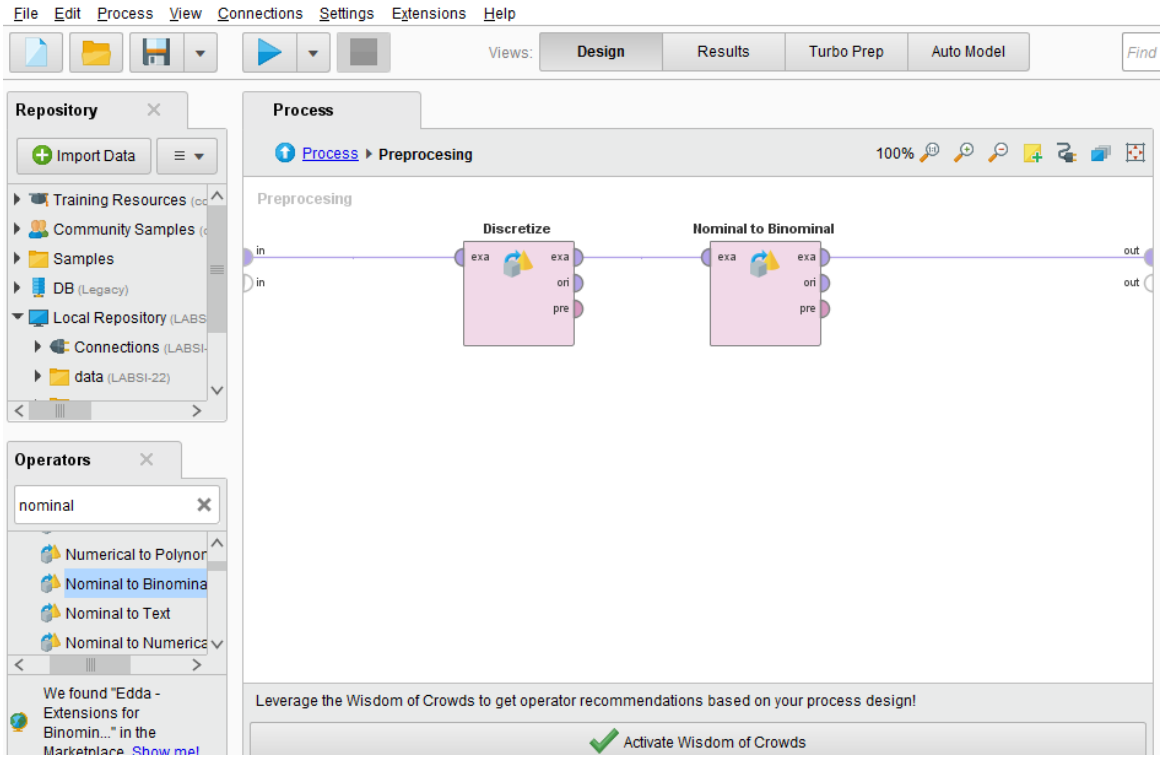

Tree (Decision Tree)
ExampleSet (//Local Repository/DataCuaca_Training1)
Zoom
Tree
Node Labels
Edge Labels
Cuaca
Cerah
Hujan
Mendung
Kelembaban_Udara
Berangin
YA
> 77.500
≤ 77.500
TIDAK
YA
TIDAK
YA
YA
TIDAK

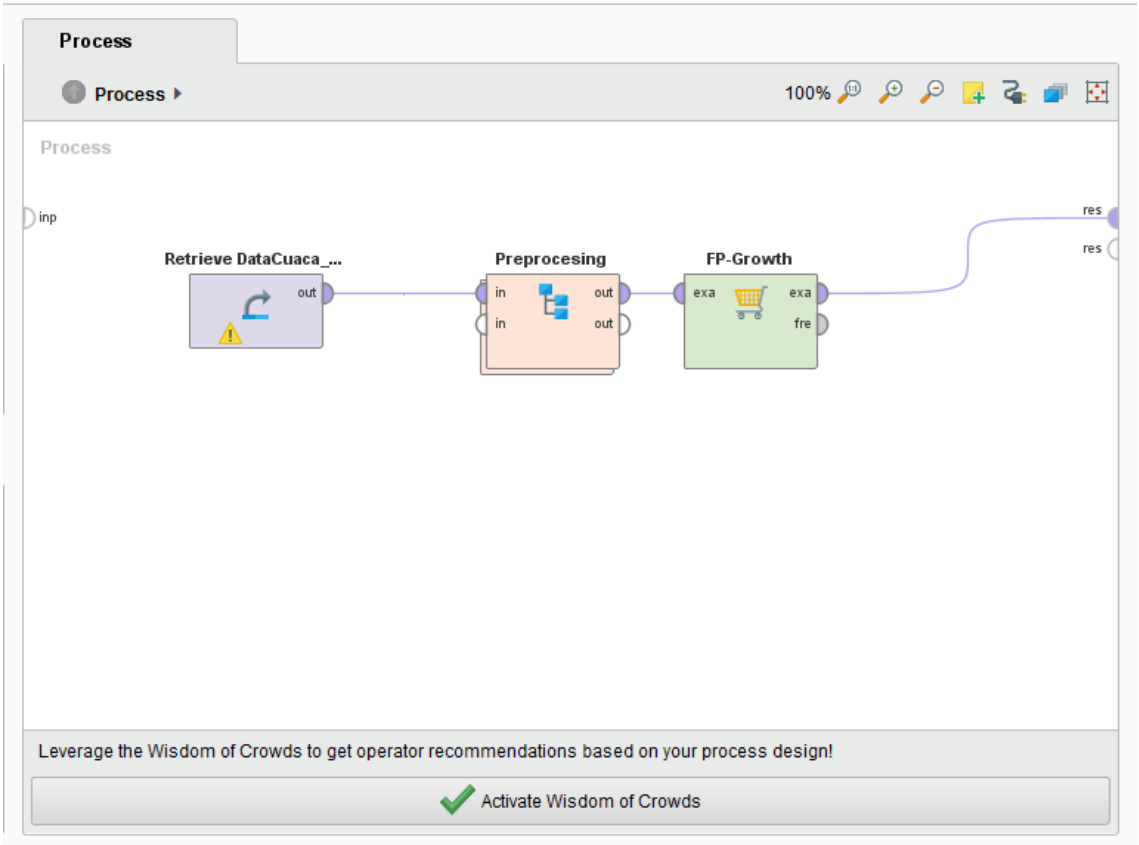

Process
Process
Cross Validation
100%
Training
Testing
Decision Tree
Apply Model
Performance
Parameters
Cross Validation
leave one out
number of folds
10
sampling type
automatic
Show advanced parameters
Change compatibility (9.3.001)
Help
Cross Validation
Concurrency
Tags: Cross-Validations, Cross-validations, Folds, K-Folds, K-folds, Validations, Estimations, Evaluations, Performances, Splitting, X-Validation, X-Prediction, Validation
Leverage the Wisdom of Crowds to get operator recommendations based on your process design!
Activate Wisdom of Crowds
IN
9:04
20/11/2019

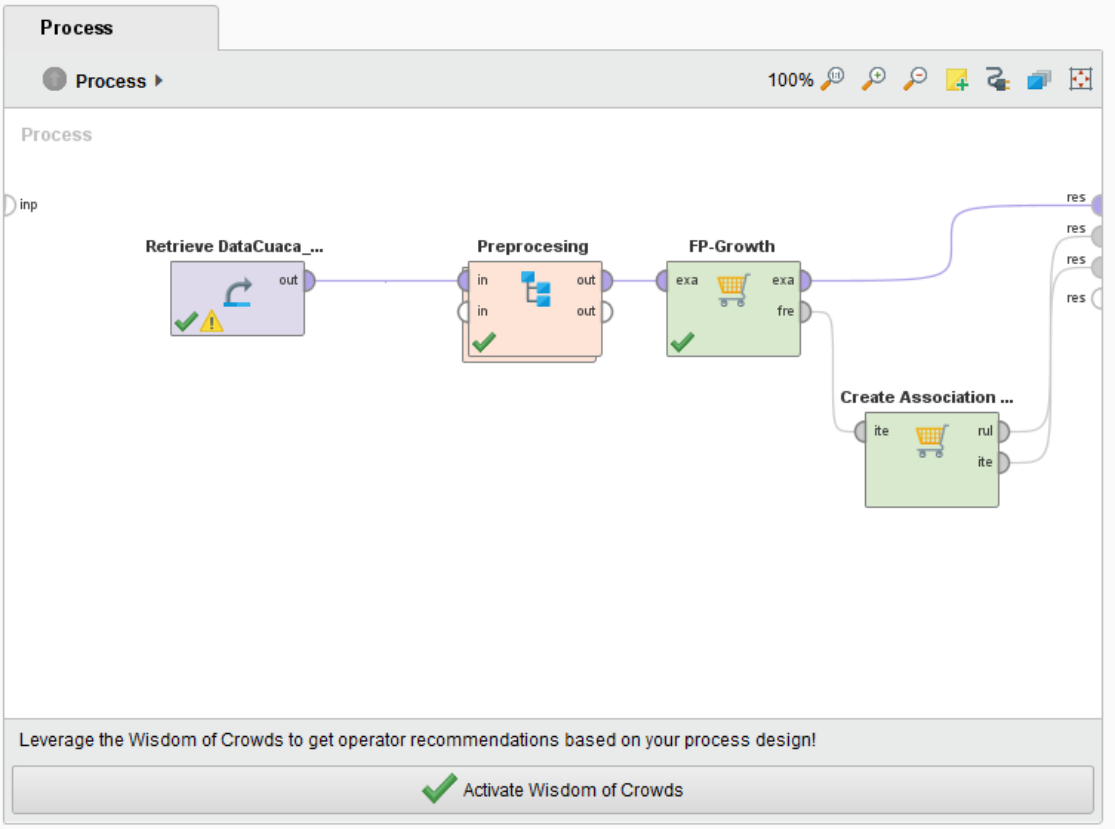
11.4.2

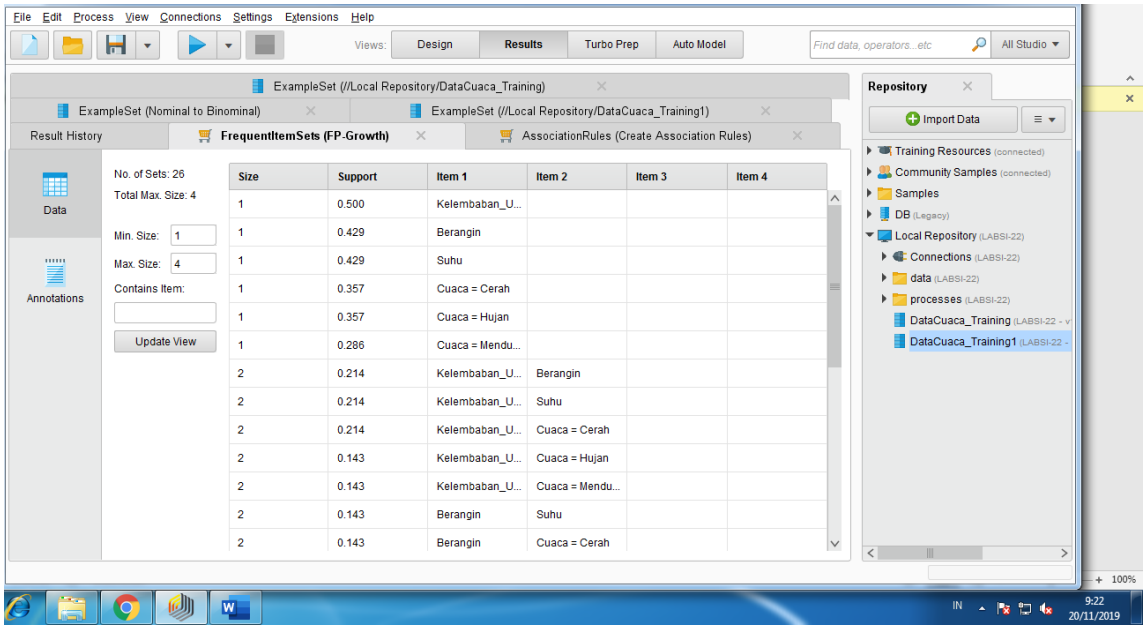

Process
inp
res
Retrieve DataCuaca_...
out
Preprocesing
in
in
out


Process
Preprocesing
100%
Preprocesing
Discretize
in
in
exa
exa
ori
pre
out

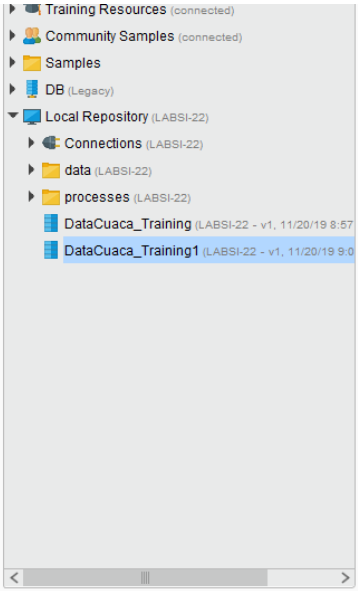

File Edit Process View Connections Settings Extensions Help
Views: Design Results Turbo Prep Auto Model
Repository
Import Data
Training Resources
Community Samples
Samples
DB (Legacy)
Local Repository
Connections
data (LABSI-22)
Operators
nominal
Numerical to Polynor
Nominal to Binomina
Nominal to Text
Nominal to Numerica
We found "Edda - Extensions for Binomin..." in the Marketplace. Show me!
Process
Process ▸ Preprocesing
100%
Preprocesing
Discretize
Nominal to Binominal
in
in
exa
ori
pre
out
out
Leverage the Wisdom of Crowds to get operator recommendations based on your process design!
Activate Wisdom of Crowds


Process
Process ▸
100%
Process
inp
Retrieve DataCuaca_...
Preprocesing
FP-Growth
out
in
exa
fre
res
Leverage the Wisdom of Crowds to get operator recommendations based on your process design!
Activate Wisdom of Crowds


Process
Process
100%
Process
inp
Retrieve DataCuaca_...
out
Preprocesing
in
in
out
out
FP-Growth
exa
exa
fre
Create Association ...
ite
rul
ite
res
res
res
res
Leverage the Wisdom of Crowds to get operator recommendations based on your process design!
Activate Wisdom of Crowds


File Edit Process View Connections Settings Extensions Help
Views: Design Results Turbo Prep Auto Model
Find data, operators...etc
All Studio
ExampleSet (//Local Repository/DataCuaca_Training)
ExampleSet (Nominal to Binominal)
ExampleSet (//Local Repository/DataCuaca_Training1)
Result History
FrequentItemSets (FP-Growth)
AssociationRules (Create Association Rules)
Data
Annotations
No. of Sets: 26
Total Max. Size: 4
Min. Size: 1
Max. Size: 4
Contains Item:
Update View
Size Support Item 1 Item 2 Item 3 Item 4
1 0.500 Kelembaban_U...
1 0.429 Berangin
1 0.429 Suhu
1 0.357 Cuaca = Cerah
1 0.357 Cuaca = Hujan
1 0.286 Cuaca = Mendu...
2 0.214 Kelembaban_U... Berangin
2 0.214 Kelembaban_U... Suhu
2 0.214 Kelembaban_U... Cuaca = Cerah
2 0.143 Kelembaban_U... Cuaca = Hujan
2 0.143 Kelembaban_U... Cuaca = Mendu...
2 0.143 Berangin Suhu
2 0.143 Berangin Cuaca = Cerah
Repository
Import Data
Training Resources (connected)
Community Samples (connected)
Samples
DB (Legacy)
Local Repository (LABSI-22)
Connections (LABSI-22)
data (LABSI-22)
processes (LABSI-22)
DataCuaca_Training (LABSI-22 - v
DataCuaca_Training1 (LABSI-22 -
100%
IN
9:22
20/11/2019

No.	Premises	Conclusion	Support
1	Berangin, Suhu	Cuaca = Cerah	0.143
2	Berangin, Cuaca = Cerah	Suhu	0.143
3	Kelembaban_Udara, Berangin, Suhu	Cuaca = Cerah	0.071
4	Kelembaban_Udara, Berangin, Cuaca = Cerah	Suhu	0.071



AssociationRules (Create Association Rules)

ExampleSet (Nominal to Binominal)

Show rules matching

all of these conclusions:

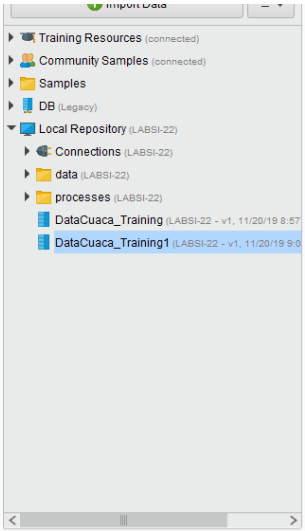
Suhu
Cuaca = Cerah

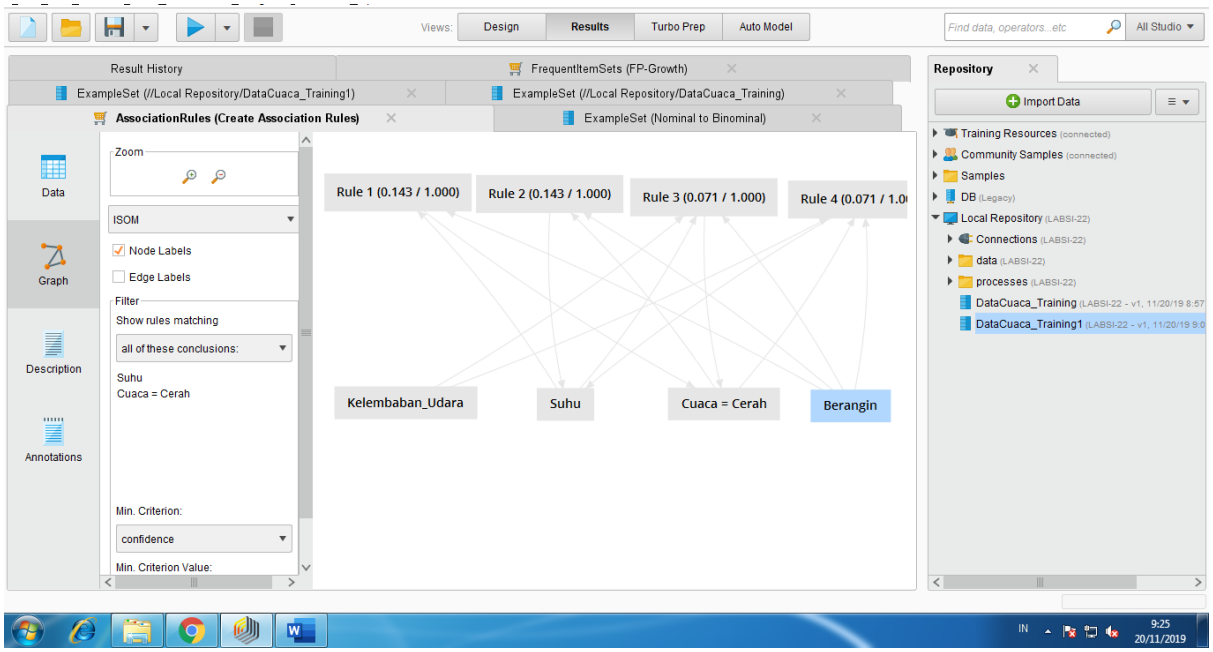
	Support	Confidence	LaPlace	Gain	p-s	Lift	Convicti...
	0.143	1	1	-0.143	0.092	2.800	∞
	0.143	1	1	-0.143	0.082	2.333	∞
	0.071	1	1	-0.071	0.046	2.800	∞
	0.071	1	1	-0.071	0.041	2.333	∞

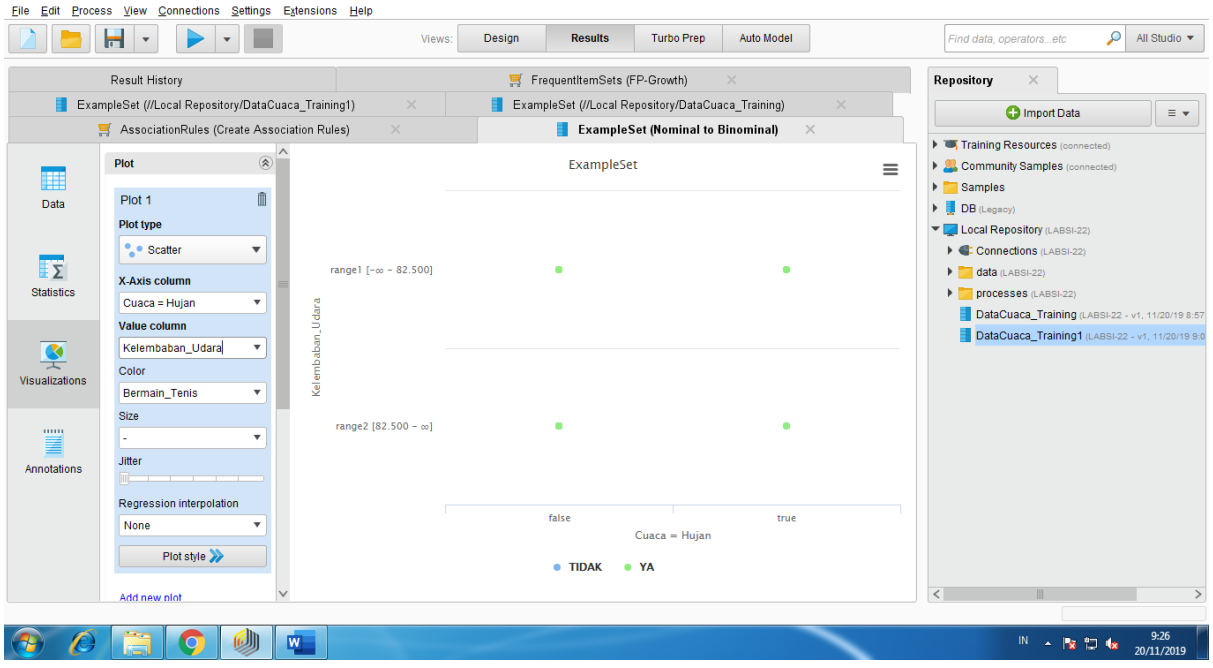
Min. Criterion:

confidence

Min. Criterion Value:




Views:
Design
Results
Turbo Prep
Auto Model
Find data, operators...etc
All Studio
Result History
FrequentItemSets (FP-Growth)
ExampleSet (//Local Repository/DataCuaca_Training1)
ExampleSet (//Local Repository/DataCuaca_Training)
AssociationRules (Create Association Rules)
ExampleSet (Nominal to Binominal)
Repository
Import Data
Training Resources (connected)
Community Samples (connected)
Samples
DB (Legacy)
Local Repository (LABSI-22)
Connections (LABSI-22)
data (LABSI-22)
processes (LABSI-22)
DataCuaca_Training (LABSI-22 - v1, 11/20/19 8:57)
DataCuaca_Training1 (LABSI-22 - v1, 11/20/19 9:0
Data
Graph
Description
Annotations
Zoom
ISOM
Node Labels
Edge Labels
Filter
Show rules matching
all of these conclusions:
Suhu
Cuaca = Cerah
Min. Criterion:
confidence
Min. Criterion Value:
Rule 1 (0.143 / 1.000)
Rule 2 (0.143 / 1.000)
Rule 3 (0.071 / 1.000)
Rule 4 (0.071 / 1.0
Kelembaban_Udara
Suhu
Cuaca = Cerah
Berangin
IN
9:25
20/11/2019


File Edit Process View Connections Settings Extensions Help
Views:
Design
Results
Turbo Prep
Auto Model
Find data, operators...etc
All Studio
Result History
FrequentItemSets (FP-Growth)
ExampleSet (//Local Repository/DataCuaca_Training1)
ExampleSet (//Local Repository/DataCuaca_Training)
AssociationRules (Create Association Rules)
ExampleSet (Nominal to Binominal)
Repository
Import Data
Training Resources (connected)
Community Samples (connected)
Samples
DB (Legacy)
Local Repository (LABSI-22)
Connections (LABSI-22)
data (LABSI-22)
processes (LABSI-22)
DataCuaca_Training (LABSI-22 - v1, 11/20/19 8:57)
DataCuaca_Training1 (LABSI-22 - v1, 11/20/19 9:0
Data
Statistics
Visualizations
Annotations
Plot
Plot 1
Plot type
Scatter
X-Axis column
Cuaca = Hujan
Value column
Kelembaban_Udara
Color
Bermain_Tenis
Size
-
Jitter
Regression interpolation
None
Plot style
Add new plot
ExampleSet
range1 [-∞ – 82.500]
range2 [82.500 – ∞]
Kelembaban_Udara
false
true
Cuaca = Hujan
TIDAK
YA
IN
9:26
20/11/2019

RuleModel

```
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.
```

Tugas

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%	

FrequentItemSets (FP-Growth) AssociationRules (Create Association Rules)

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	Ge[Gender]	Rerata_SKS =...			
2	0.250	Gender	Asal_Sekolah			
2	0.250	Gender	Jurusan_SMA ...			
2	0.200	Gender	Asisten			

FrequentItemSets (FP-Growth) | AssociationRules (Create Association Rules)

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
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			

FrequentItemSets (FP-Growth) | AssociationRules (Create Association Rules)

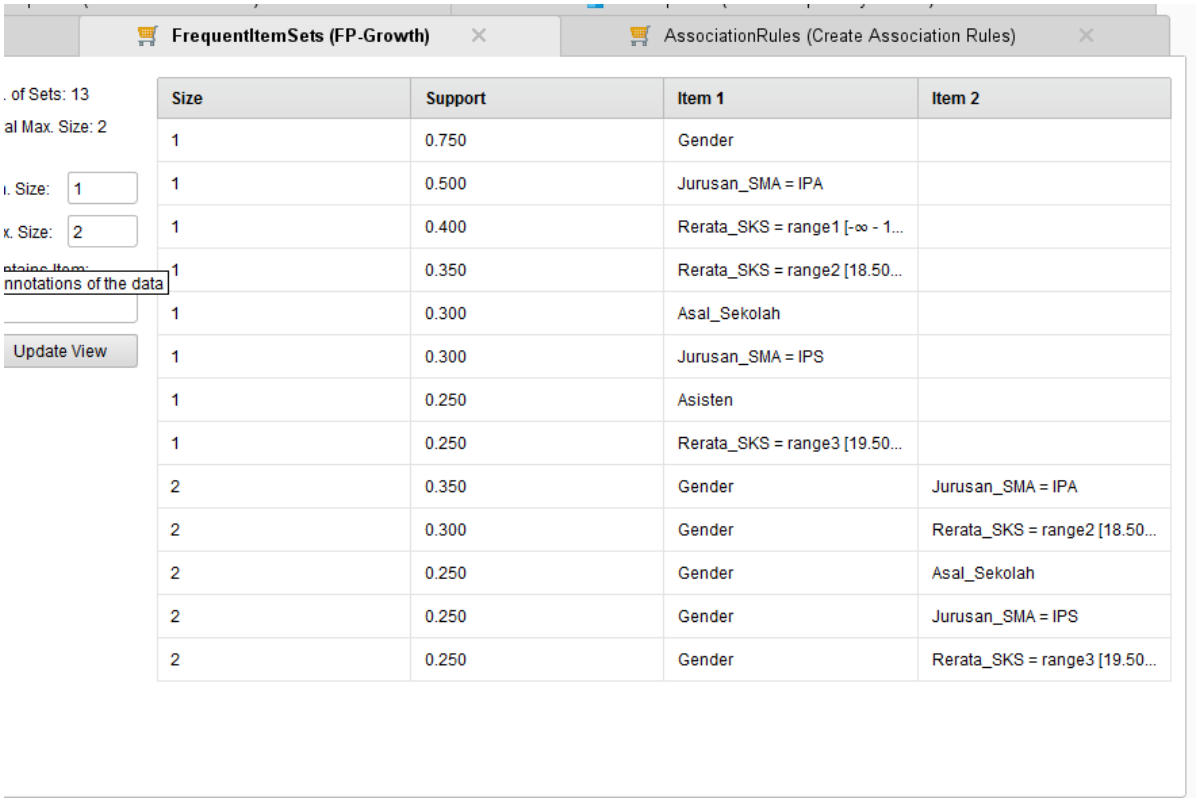
No. of Sets: 10
Total Max. Size: 2

Min. Size: 1
Max. Size: 2
Contains Item:

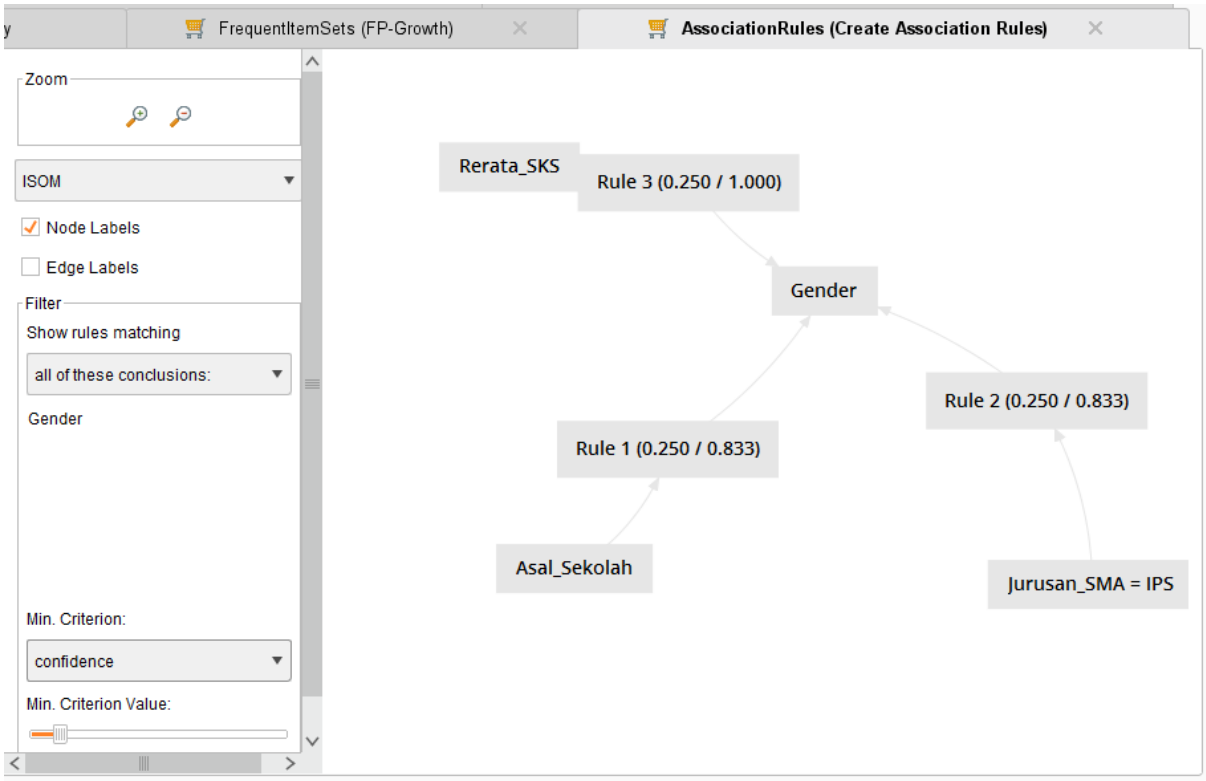
Update View

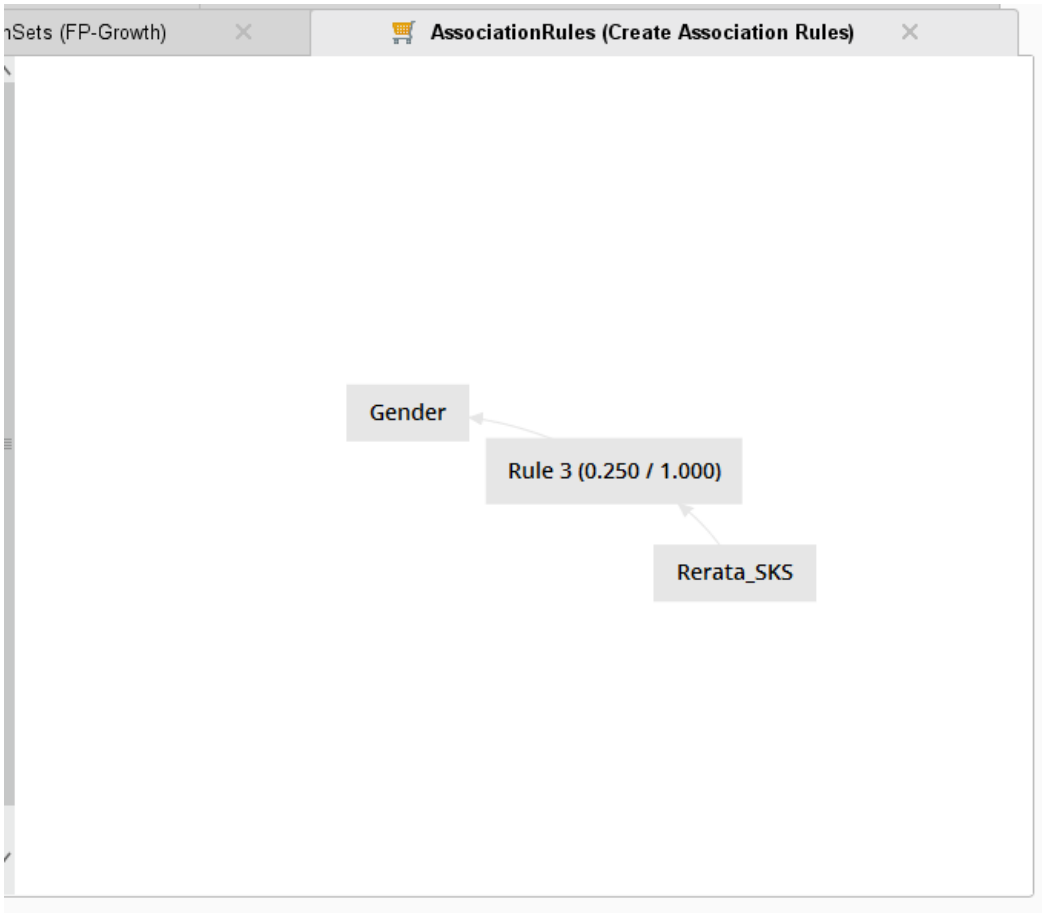
Size	Support	Item 1	Item 2
1	0.750	Gender	
1	0.500	Jurusan_SMA = IPA	
1	0.300	Asal_Sekolah	
1	0.300	Jurusan_SMA = IPS	
1	0.250	Asisten	
1	0.250	Rerata_SKS	
2	0.350	Gender	Jurusan_SMA = IPA
2	0.250	Gender	Asal_Sekolah
2	0.250	Gender	Jurusan_SMA = IPS
2	0.250	Gender	Rerata_SKS

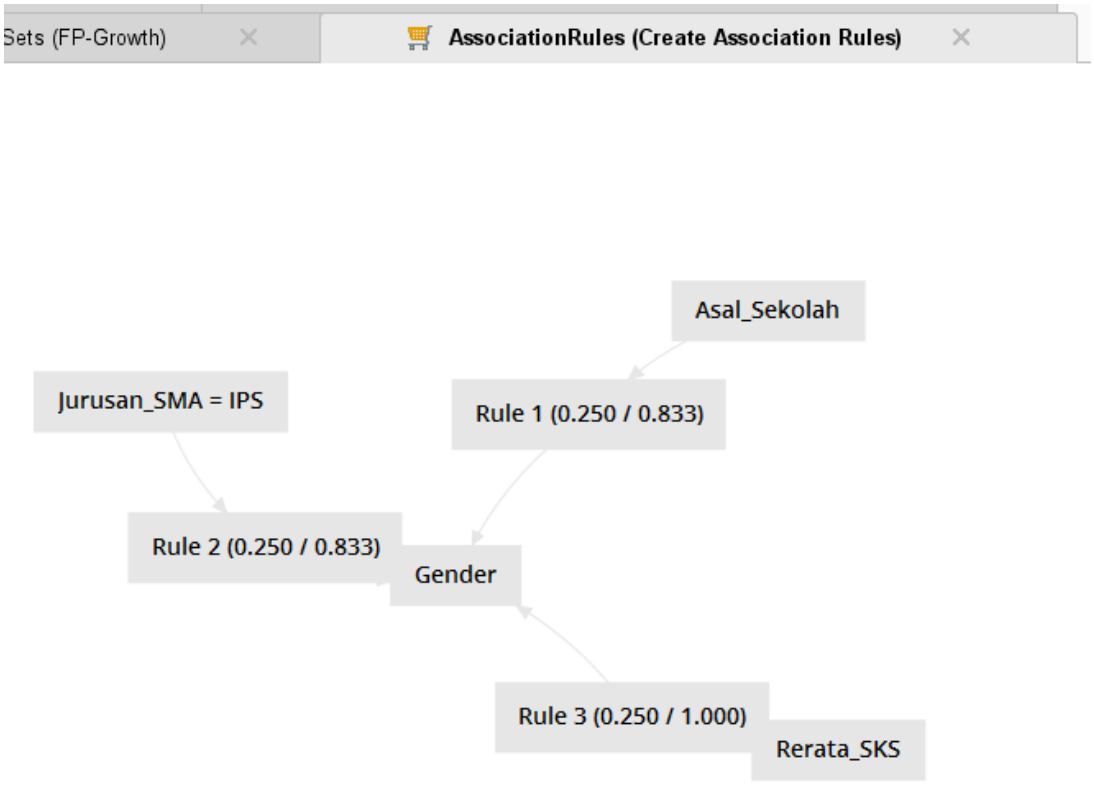
Gender

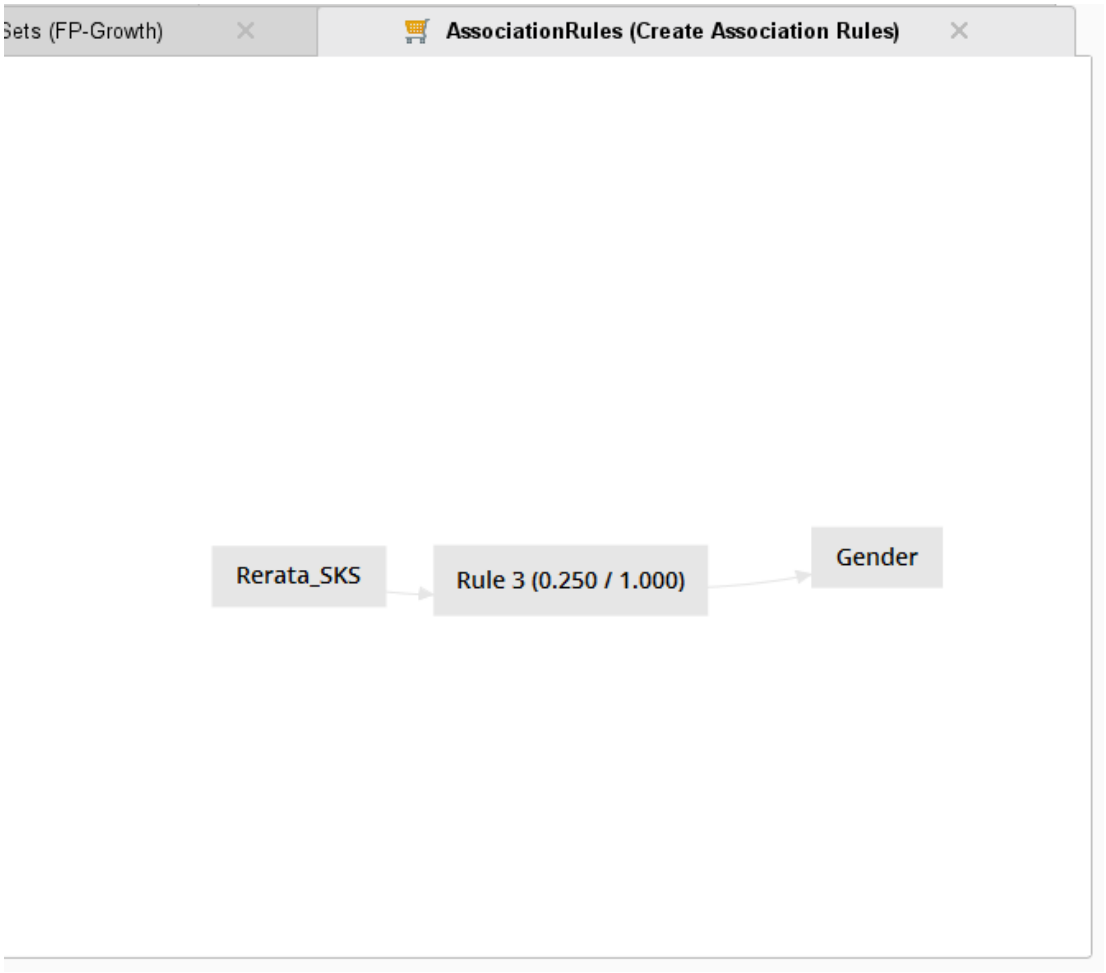


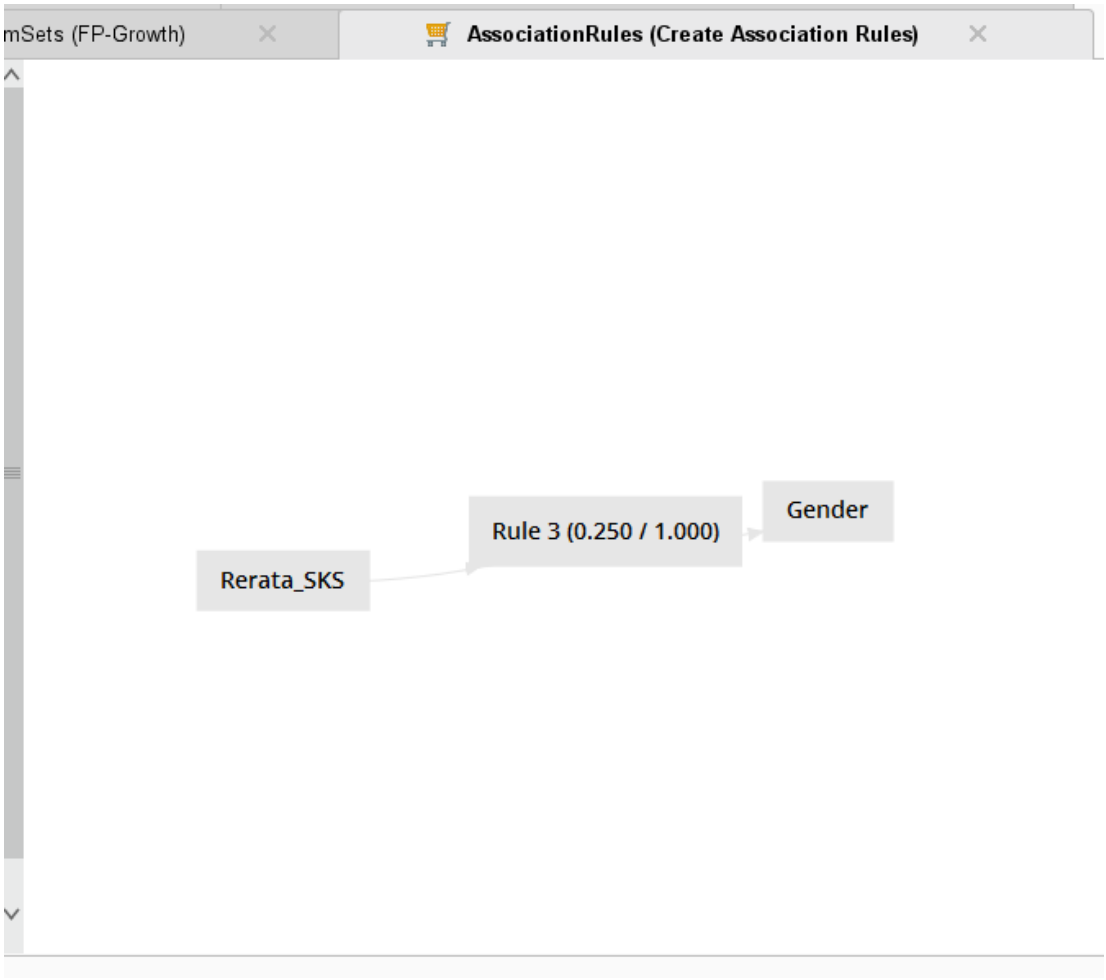
Size	Support	Item 1	Item 2
1	0.750	Gender	
1	0.500	Jurusan_SMA = IPA	
1	0.400	Rerata_SKS = range1 [-∞ - 1...	
1	0.350	Rerata_SKS = range2 [18.50...	
1	0.300	Asal_Sekolah	
1	0.300	Jurusan_SMA = IPS	
1	0.250	Asisten	
1	0.250	Rerata_SKS = range3 [19.50...	
2	0.350	Gender	Jurusan_SMA = IPA
2	0.300	Gender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




nSets (FP-Growth)
AssociationRules (Create Association Rules)
Gender
Rule 3 (0.250 / 1.000)
Rerata_SKS


Sets (FP-Growth)
AssociationRules (Create Association Rules)
Asal_Sekolah
Jurusan_SMA = IPS
Rule 1 (0.250 / 0.833)
Rule 2 (0.250 / 0.833)
Gender
Rule 3 (0.250 / 1.000)
Rerata_SKS


Sets (FP-Growth)
AssociationRules (Create Association Rules)
Rerata_SKS
Rule 3 (0.250 / 1.000)
Gender


mSets (FP-Growth)
AssociationRules (Create Association Rules)
Rerata_SKS
Rule 3 (0.250 / 1.000)
Gender