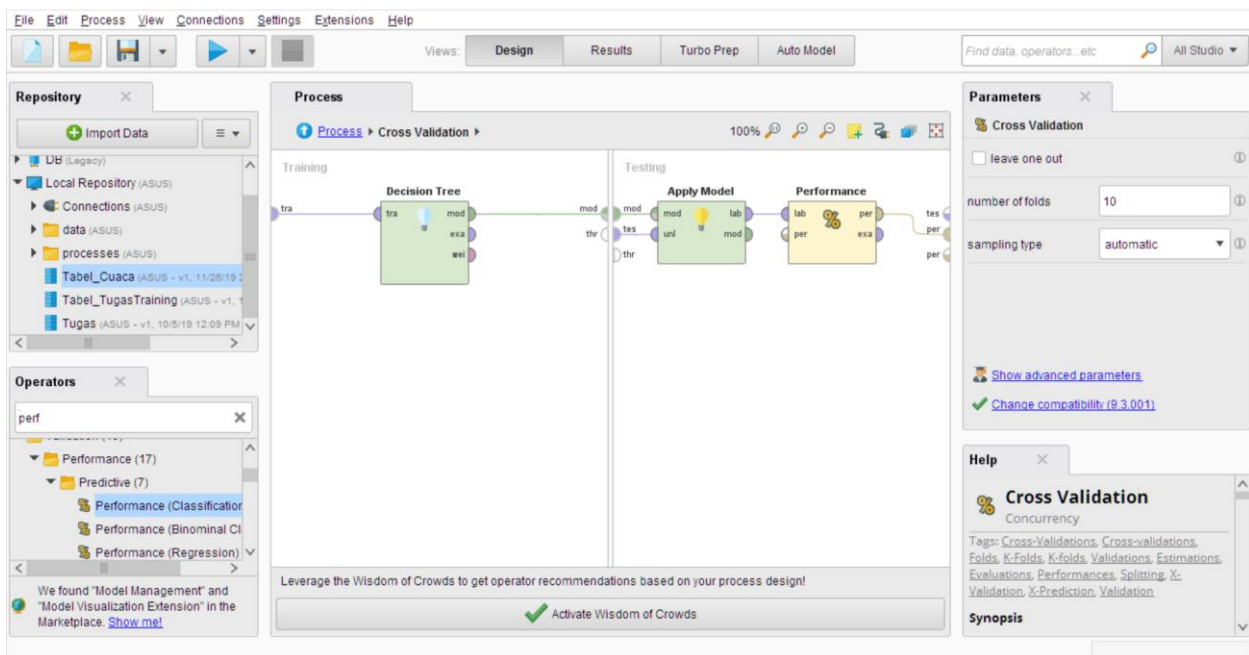
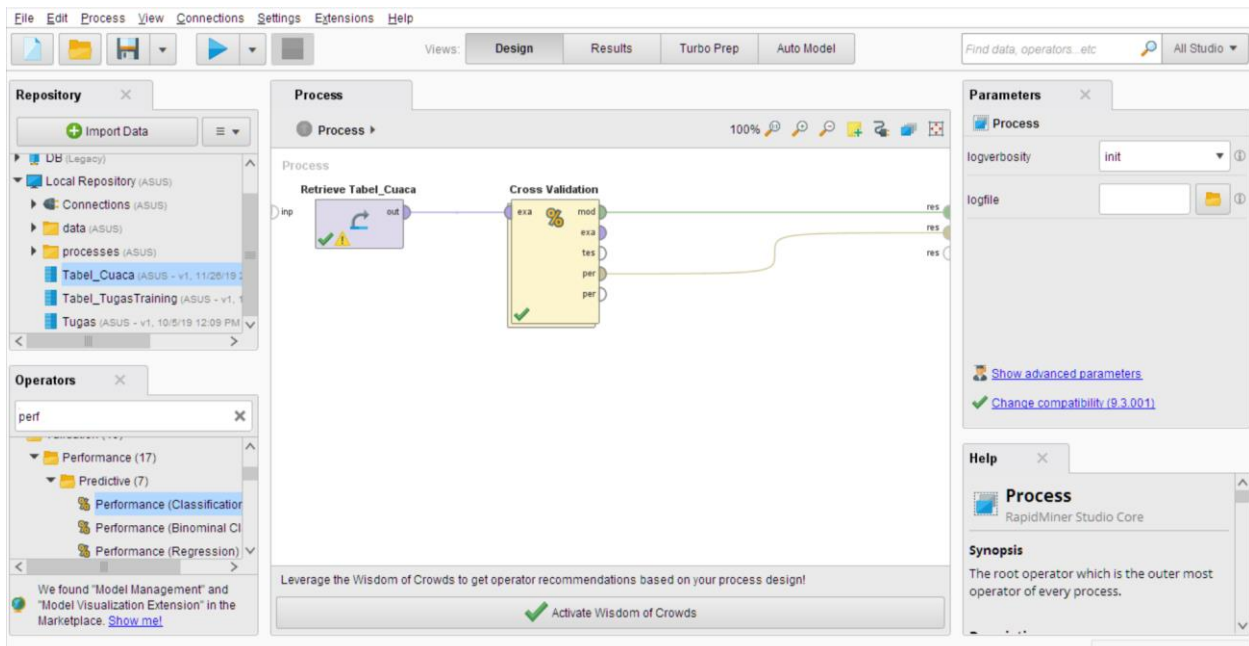
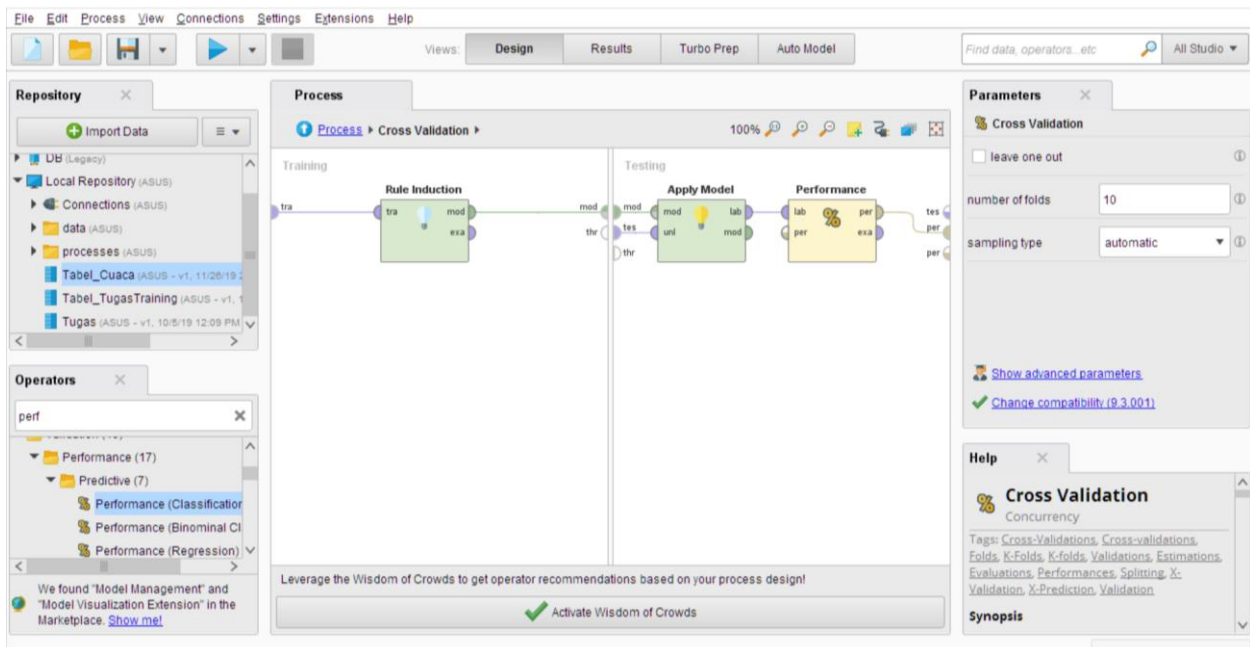
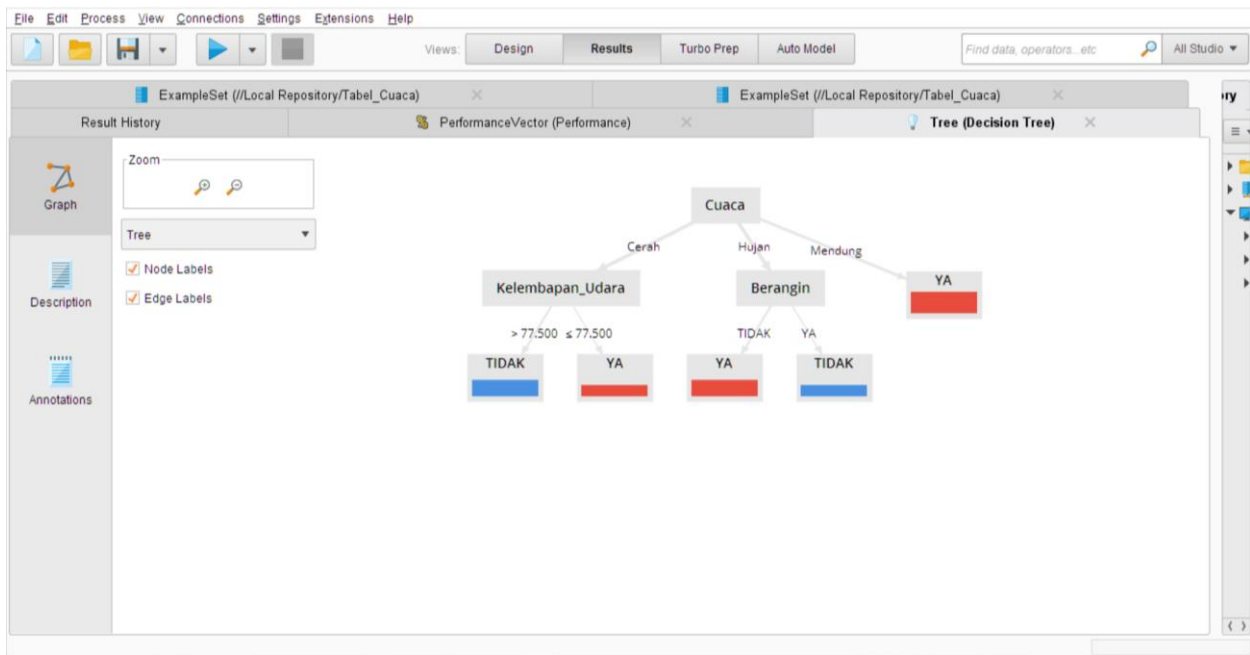


Praktikum 11.4.1





File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators...etc All Studio

ExampleSet (/Local Repository/Tabel_Cuaca) ExampleSet (/Local Repository/Tabel_Cuaca)

Result History PerformanceVector (Performance) RuleModel (Rule Induction)

RuleModel

Description

```
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)
```

Annotations

correct: 12 out of 13 training examples.

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators...etc All Studio

ExampleSet (/Local Repository/tabelbaru) ExampleSet (/Local Repository/cuaca_training)

Result History PerformanceVector (Performance) RuleModel (Rule Induction)

Criterion accuracy

Performance

Table View Plot View

accuracy: 70.00% +/- 42.16% (micro average: 71.43%)

	true TIDAK	true YA	class precision
pred. TIDAK	1	0	100.00%
pred. YA	4	9	69.23%
class recall	20.00%	100.00%	

Repository

Import Data

- Training Resources (connected)
- Community Samples (connected)
- Samples
- DB (Legacy)
- Local Repository (LABSI-19)
 - Connections (LABSI-19)
 - data (LABSI-19)
 - processes (LABSI-19)
 - cuaca_training (LABSI-19 - v1, 11/20/19 9)
 - tabelbaru (LABSI-19 - v1, 11/20/19 9)

Praktikum 11.4.2

a) Frequent Item Set

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators...etc All Studio

ExampleSet (/Local Repository/tabelbaru) ExampleSet (/Local Repository/cuaca_training)

AssociationRules (Create Association Rules) ExampleSet (Nominal to Binominal)

Result History FrequentItemSets (FP-Growth)

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	Kelembapan_Uda...			
1	0.429	Berangin			
1	0.429	Suhu			
1	0.357	Cuaca = Cerah			
1	0.357	Cuaca = Hujan			
1	0.286	Cuaca = Mendung			
2	0.214	Kelembapan_Uda...	Berangin		
2	0.214	Kelembapan_Uda...	Suhu		
2	0.214	Kelembapan_Uda...	Cuaca = Cerah		
2	0.143	Kelembapan_Uda...	Cuaca = Hujan		
2	0.143	Kelembapan_Uda...	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		
2	0.214	Suhu	Cuaca = Cerah		

Repository

Import Data

Training Resources (connected)
Community Samples (connected)
Samples
DB (Legacy)
Local Repository (LABSI-19)
Connections (LABSI-19)
data (LABSI-19)
processes (LABSI-19)
cuaca_training (LABSI-19 - v1, 11/20/19 9:55 AM - 5 KB)
oke (LABSI-19 - v1, 11/20/19 9:20 AM - 5 KB)
tabelbaru (LABSI-19 - v1, 11/20/19 9:13 AM - 527 by

File Edit Process View Connections Settings Extensions Help

Views: Design Cuaca = Hujan Turbo Prep Auto Model

Find data, operators...etc All Studio

ExampleSet (/Local Repository/tabelbaru) ExampleSet (/Local Repository/cuaca_training)

AssociationRules (Create Association Rules) ExampleSet (Nominal to Binominal)

Result History FrequentItemSets (FP-Growth)

No. of Sets: 26
Total Max. Size: 4

Min. Size: 1
Max. Size: 4
Contains Item:
Update View

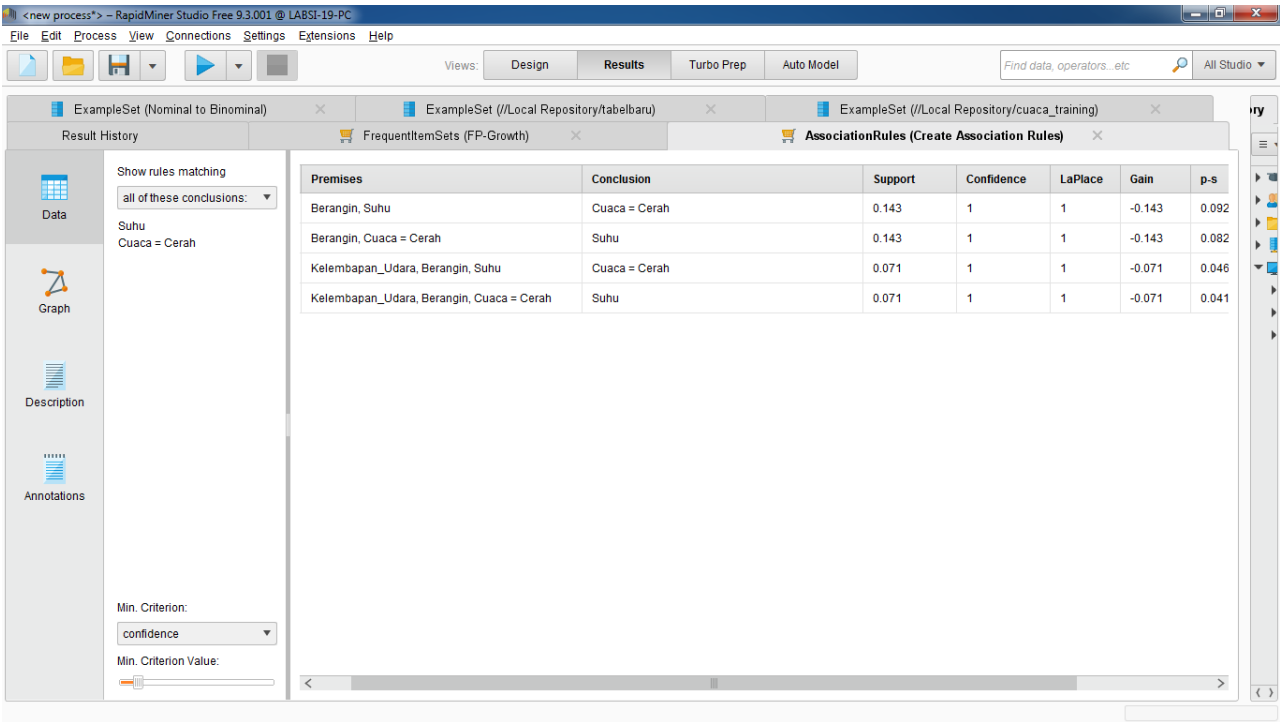
Size	Support	Item 1	Item 2	Item 3	Item 4
2	0.143	Kelembapan_Uda...	Cuaca = Mendung		
2	0.143	Berangin	Suhu		
2	0.143	Berangin	Cuaca = Cerah		
2	0.143	Berangin	Cuaca = Hujan		
2	0.143	Berangin	Cuaca = Mendung		
2	0.214	Suhu	Cuaca = Cerah		
2	0.071	Suhu	Cuaca = Hujan		
2	0.143	Suhu	Cuaca = Mendung		
3	0.071	Kelembapan_Uda...	Berangin	Suhu	
3	0.071	Kelembapan_Uda...	Berangin	Cuaca = Cerah	
3	0.071	Kelembapan_Uda...	Berangin	Cuaca = Hujan	
3	0.071	Kelembapan_Uda...	Berangin	Cuaca = Mendung	
3	0.143	Kelembapan_Uda...	Suhu	Cuaca = Cerah	
3	0.071	Kelembapan_Uda...	Suhu	Cuaca = Mendung	
3	0.143	Berangin	Suhu	Cuaca = Cerah	
4	0.071	Kelembapan_Uda...	Berangin	Suhu	Cuaca = Cerah

Repository

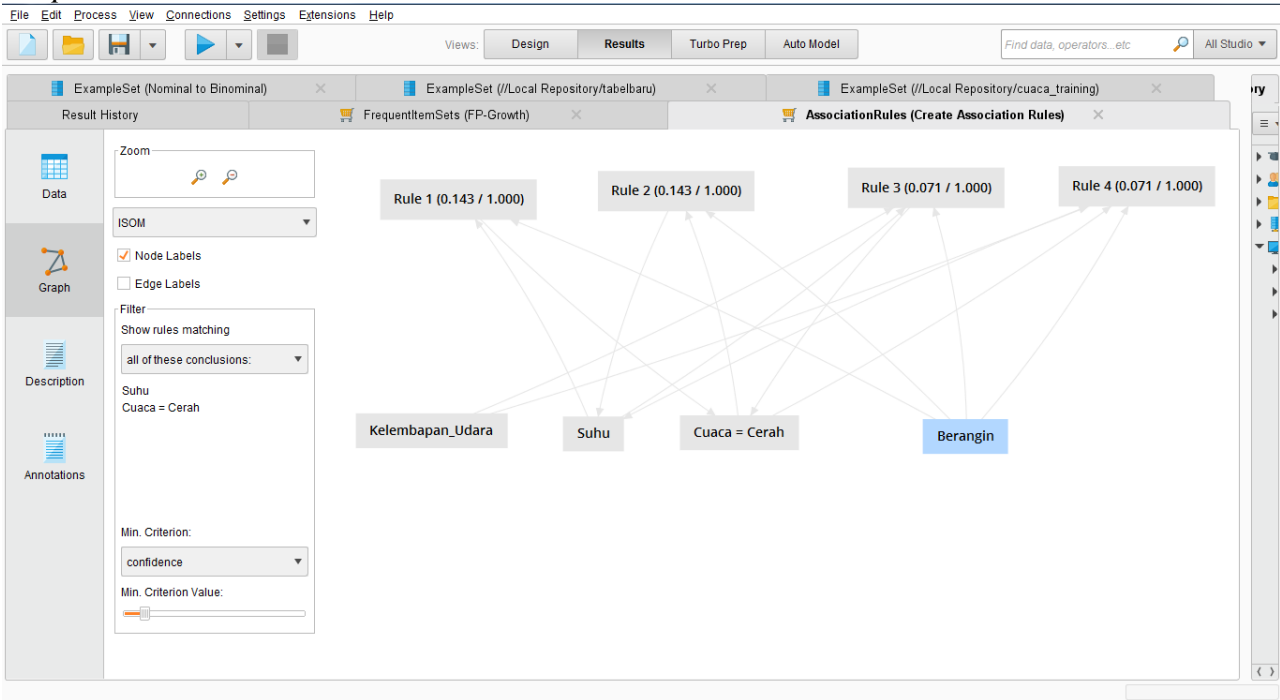
Import Data

Training Resources (connected)
Community Samples (connected)
Samples
DB (Legacy)
Local Repository (LABSI-19)
Connections (LABSI-19)
data (LABSI-19)
processes (LABSI-19)
cuaca_training (LABSI-19 - v1, 11/20/19 9:55 AM - 5 KB)
oke (LABSI-19 - v1, 11/20/19 9:20 AM - 5 KB)
tabelbaru (LABSI-19 - v1, 11/20/19 9:13 AM - 527 by

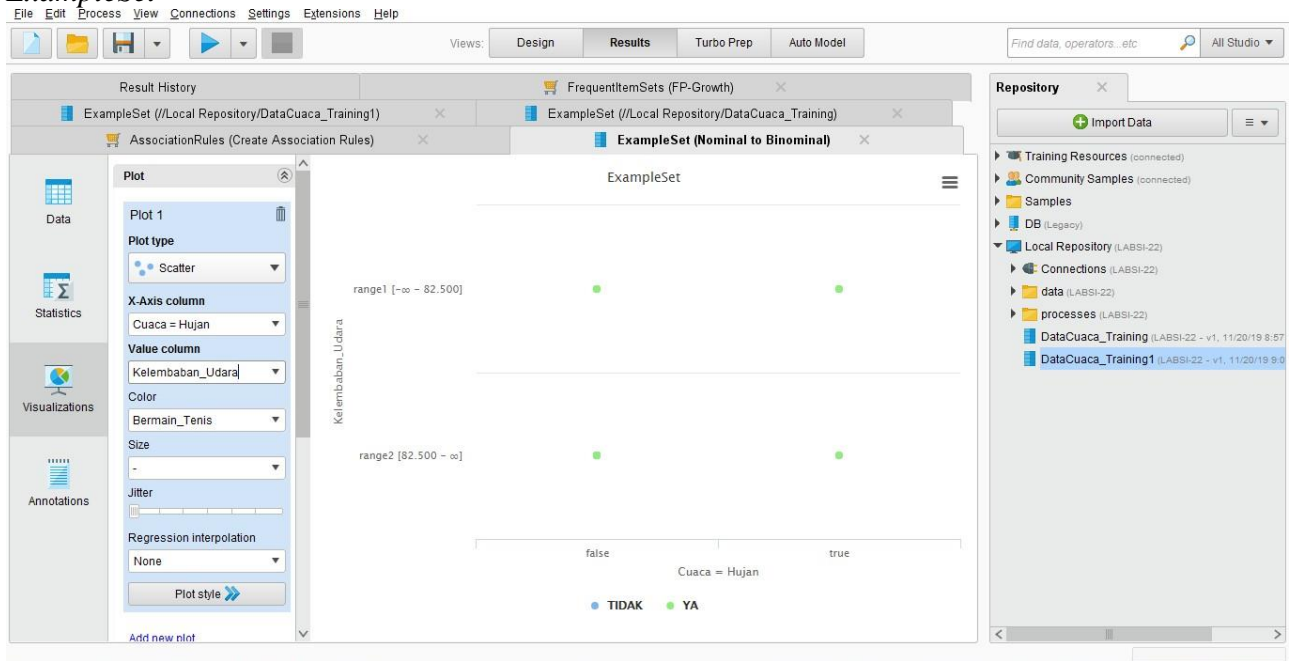
b)Association Rules
table view



Graph View



ExampleSet



Tugas No.1

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File Edit Process View Connections Cloud Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Repository

Import Data

- Connections (ASUS)
- data (ASUS)
- processes (ASUS)
- Tabel_Cuaca (ASUS - v1, 11/26/19 2:44 PM)
- Tabel_TugasTraining (ASUS - v1, 11/26/19 3:44 PM)
- Tugas (ASUS - v1, 11/26/19 3:44 PM)
- Tugas training (ASUS - v1, 11/26/19 3:44 PM)
- Cloud Repository (disconnected)

Operators

perfor

- Validation (19)
- Performance (17)
- Predictive (7)
- Performance (Classifier)
- Performance (Binominal CI)

We found "Model Visualization Extension" and "Model Management" in the Marketplace. [Show me!](#)

Process

Process > Cross Validation

100%

Training: tra → Rule Induction → mod → thr

Testing: mod → tes → uni → lab → per → tes → per

Parameters

Rule Induction

Lightbulb icon

criterion: information_gain ⓘ

sample ratio: 0.9 ⓘ

purity: 0.9 ⓘ

minimal prune benefit: 0.25 ⓘ

[Show advanced parameters](#)

Help

Rule Induction

RapidMiner Studio Core

Tags: Ripper, Version space, Cn2, Part, Ridor, OneR, Prism, Jrip, Rules

Synopsis

This operator learns a pruned set of rules with respect to the information gain from

Leverage the Wisdom of Crowds to get operator recommendations based on your process design!

✓ Activate Wisdom of Crowds

Result History

- PerformanceVector (Performance)
- RuleModel (Rule Induction)
- ExampleSet (/Local Repository/Tugas)

RuleModel

Description

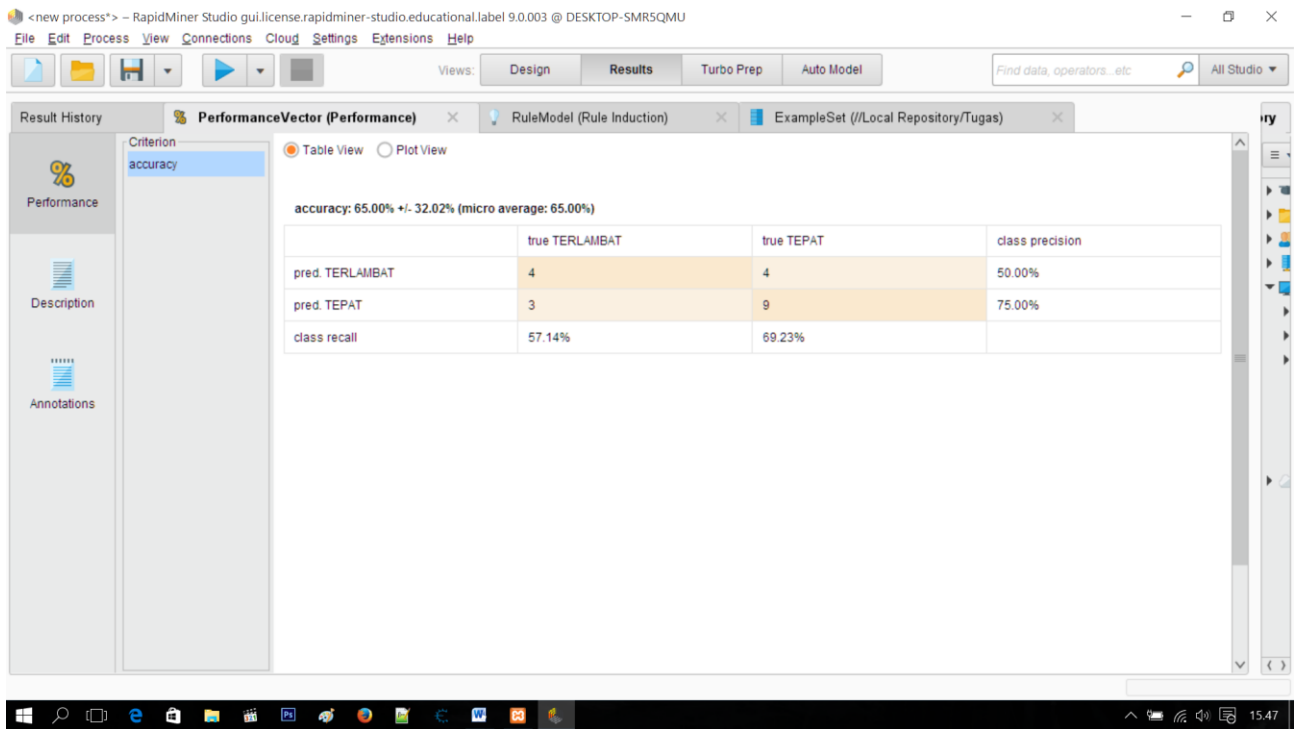
```
if Rerata_SKS > 18.500 then TEPAT (2 / 10)
if Gender = PRIA then TERLAMBAT (4 / 0)
if Jurusan_SMA = IPA then TEPAT (0 / 2)
if Jurusan_SMA = IPS then TERLAMBAT (1 / 0)
else TEPAT (0 / 0)
```

Annotations

correct: 17 out of 19 training examples.

15.46

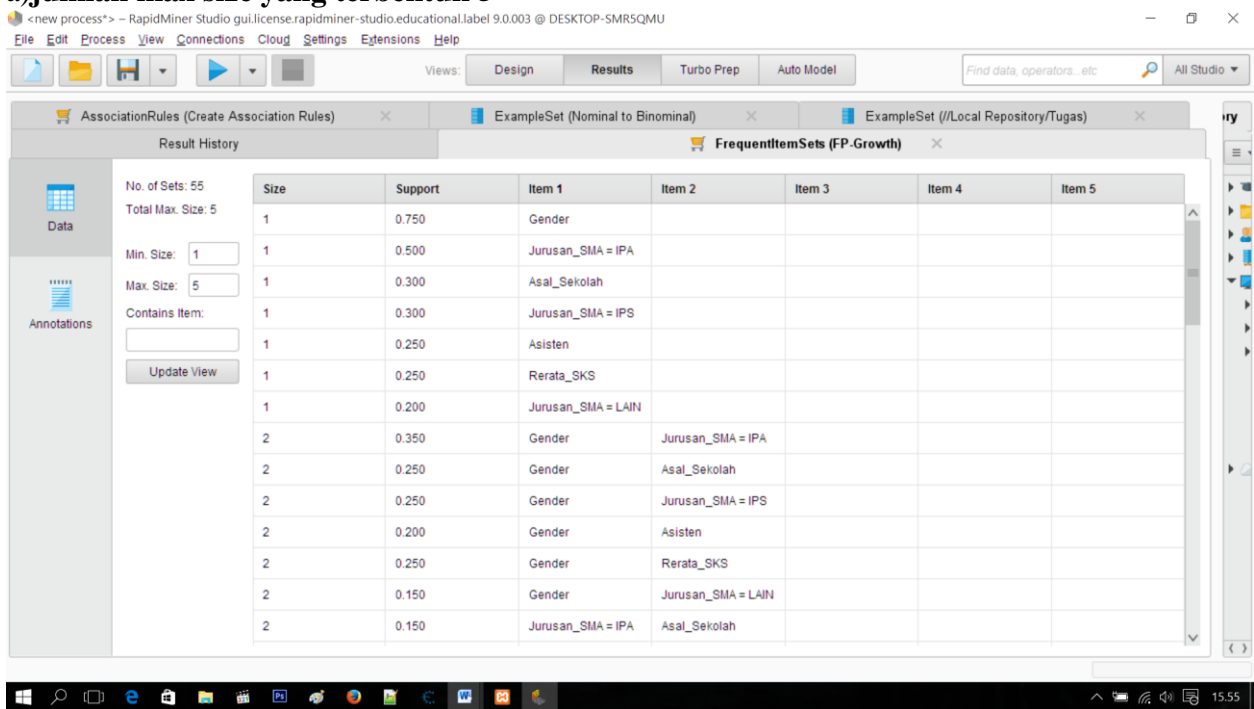
15.47



No.2

Number of bins=2

a) jumlah max size yang terbentuk 5



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File Edit Process View Connections Cloud Settings Extensions Help

Views: Design Results Turbo Prep Auto Model Find data, operators, etc. All Studio

AssociationRules (Create Association Rules) ExampleSet (Nominal to Binominal) ExampleSet (/Local Repository/Tugas)

Result History

FrequentItemSets (FP-Growth)

No. of Sets: 55
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
3	0.050	Asal_Sekolah	Rerata_SKS	Jurusan_SMA = LAIN		
3	0.050	Asisten	Rerata_SKS	Jurusan_SMA = LAIN		
4	0.050	Gender	Jurusan_SMA = IPA	Asal_Sekolah	Asisten	
4	0.050	Gender	Jurusan_SMA = IPA	Asal_Sekolah	Rerata_SKS	
4	0.100	Gender	Jurusan_SMA = IPA	Asisten	Rerata_SKS	
4	0.050	Gender	Asal_Sekolah	Jurusan_SMA = IPS	Rerata_SKS	
4	0.100	Gender	Asal_Sekolah	Asisten	Rerata_SKS	
4	0.050	Gender	Asal_Sekolah	Asisten	Jurusan_SMA = LAIN	
4	0.050	Gender	Asal_Sekolah	Rerata_SKS	Jurusan_SMA = LAIN	
4	0.050	Gender	Asisten	Rerata_SKS	Jurusan_SMA = LAIN	
4	0.050	Jurusan_SMA = IPA	Asal_Sekolah	Asisten	Rerata_SKS	
4	0.050	Asal_Sekolah	Asisten	Rerata_SKS	Jurusan_SMA = LAIN	
5	0.050	Gender	Jurusan_SMA = IPA	Asal_Sekolah	Asisten	Rerata_SKS
5	0.050	Gender	Asal_Sekolah	Asisten	Rerata_SKS	Jurusan_SMA = LAIN

b) association rules

table view

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File Edit Process View Connections Cloud Settings Extensions Help

Views: Design Results Turbo Prep Auto Model Find data, operators, etc. All Studio

AssociationRules (Create Association Rules) ExampleSet (Nominal to Binominal) ExampleSet (/Local Repository/Tugas)

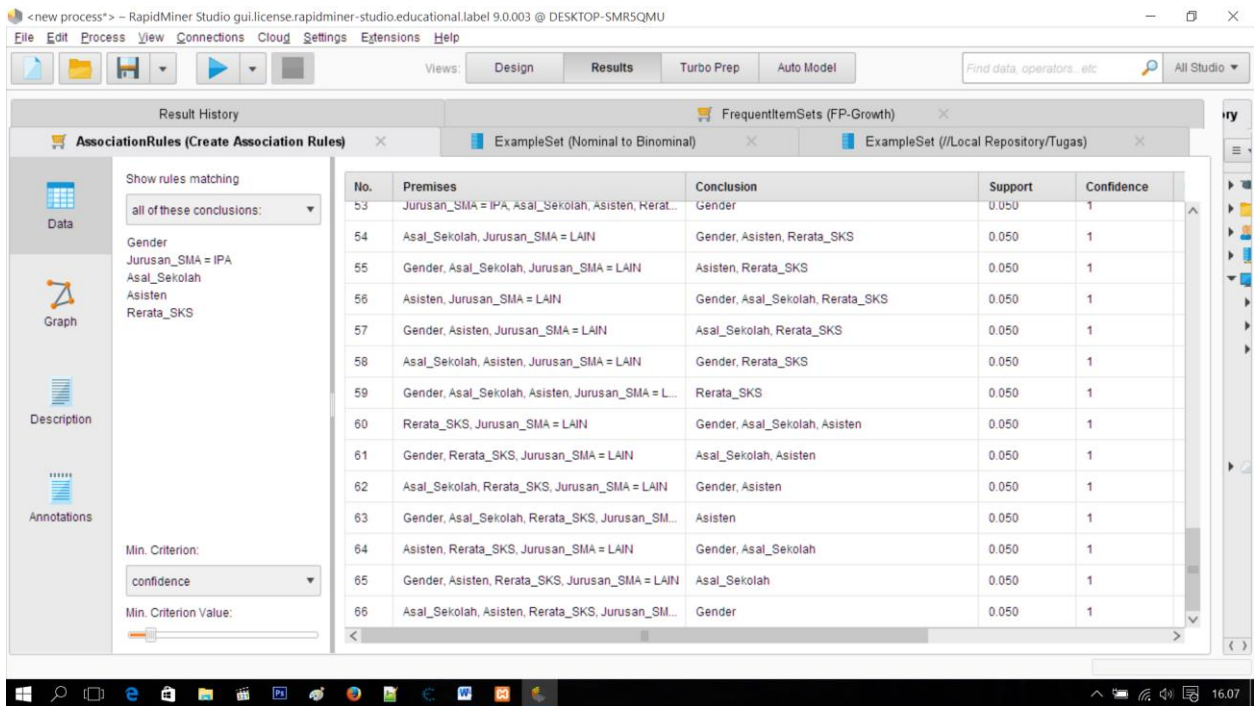
Result History

FrequentItemSets (FP-Growth)

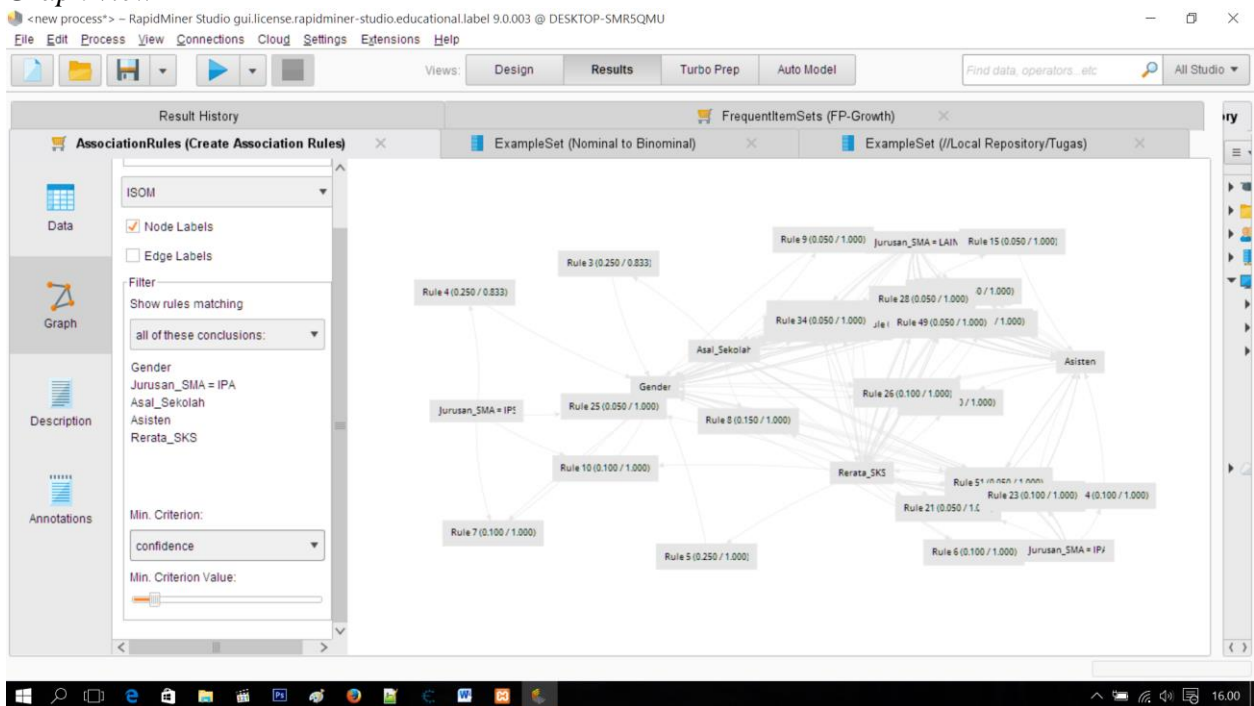
Show rules matching
all of these conclusions:
Gender
Jurusan_SMA = IPA
Asal_Sekolah
Asisten
Rerata_SKS

Min. Criterion:
confidence
Min. Criterion Value:

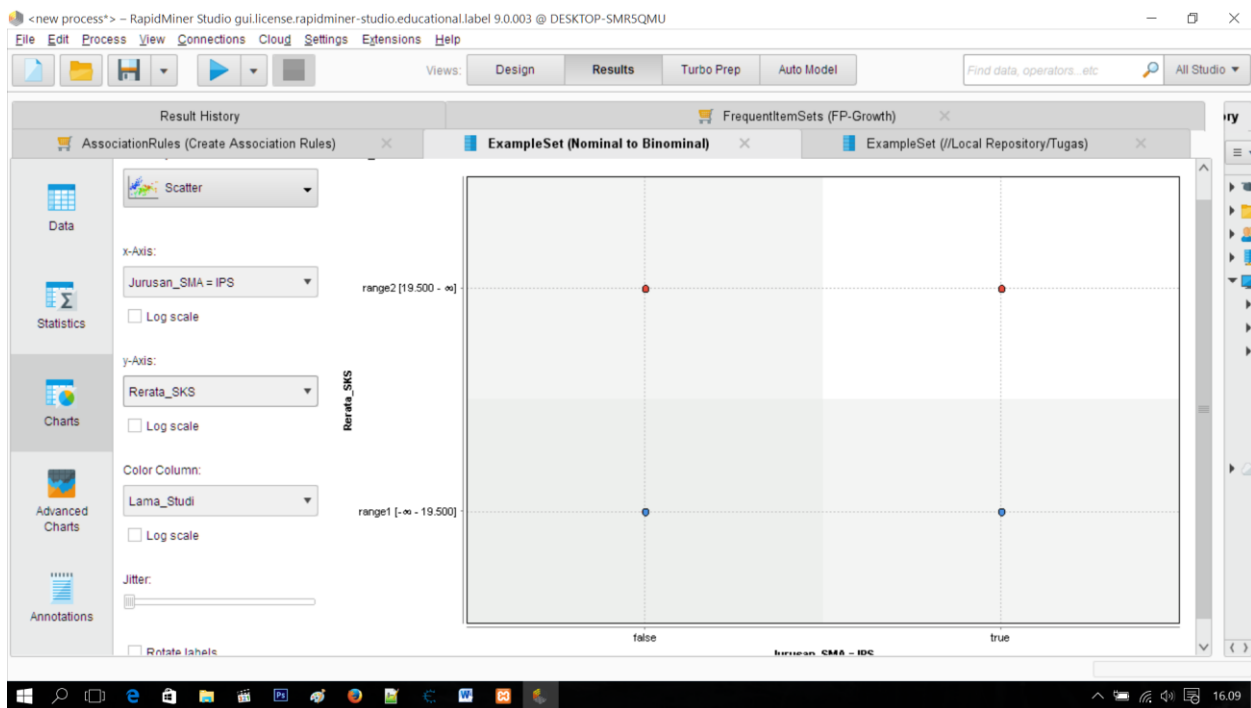
No.	Premises	Conclusion	Support	Confidence
3	Asal_Sekolah	Gender	0.250	0.833
4	Jurusan_SMA = IPS	Gender	0.250	0.833
5	Rerata_SKS	Gender	0.250	1
6	Jurusan_SMA = IPA, Rerata_SKS	Gender	0.100	1
7	Asal_Sekolah, Jurusan_SMA = IPS	Gender	0.100	1
8	Asal_Sekolah, Rerata_SKS	Gender	0.150	1
9	Asal_Sekolah, Jurusan_SMA = LAIN	Gender	0.050	1
10	Jurusan_SMA = IPS, Rerata_SKS	Gender	0.100	1
11	Asisten, Rerata_SKS	Gender	0.150	1
12	Asisten, Jurusan_SMA = LAIN	Gender	0.050	1
13	Rerata_SKS, Jurusan_SMA = LAIN	Gender	0.050	1
14	Jurusan_SMA = IPA, Rerata_SKS	Asisten	0.100	1
15	Asal_Sekolah, Jurusan_SMA = LAIN	Asisten	0.050	1
16	Asisten, Jurusan_SMA = LAIN	Asal_Sekolah	0.050	1



Graph view



c) grafik chart



Number of bins=nilai lain(3)

a) jumlah max size yang terbentuk 5

Result History

ExampleSet (Nominal to Binominal)

ExampleSet (/Local Repository/Tugas)

FrequentItemSets (FP-Growth)

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 = IPA				
1	0.400	Rerata_SKS = rang...				
1	0.350	Rerata_SKS = rang...				
1	0.300	Asal_Sekolah				
1	0.300	Jurusan_SMA = IPS				
1	0.250	Asisten				
1	0.250	Rerata_SKS = rang...				
1	0.200	Jurusan_SMA = LAIN				
2	0.350	Gender	Jurusan_SMA = IPA			
2	0.200	Gender	Rerata_SKS = rang...			
2	0.300	Gender	Rerata_SKS = rang...			
2	0.250	Gender	Asal_Sekolah			
2	0.250	Gender	Jurusan_SMA = IPS			

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File Edit Process View Connections Cloud Settings Extensions Help

Views: Design Results Turbo Prep Auto Model Find data, operators, etc. All Studio

AssociationRules (Create Association Rules) ExampleSet (Nominal to Binomial) ExampleSet (/Local Repository/Tugas)

Result History

FrequentItemSets (FP-Growth)

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
4	0.050	Gender	Jurusan_SMA = IPA	Asal_Sekolah	Asisten	
4	0.050	Gender	Jurusan_SMA = IPA	Asal_Sekolah	Rerata_SKS = rang...	
4	0.100	Gender	Jurusan_SMA = IPA	Asisten	Rerata_SKS = rang...	
4	0.050	Gender	Rerata_SKS = rang...	Asal_Sekolah	Jurusan_SMA = IPS	
4	0.050	Gender	Asal_Sekolah	Jurusan_SMA = IPS	Rerata_SKS = rang...	
4	0.100	Gender	Asal_Sekolah	Asisten	Rerata_SKS = rang...	
4	0.050	Gender	Asal_Sekolah	Asisten	Jurusan_SMA = LAIN	
4	0.050	Gender	Asal_Sekolah	Rerata_SKS = rang...	Jurusan_SMA = LAIN	
4	0.050	Gender	Asisten	Rerata_SKS = rang...	Jurusan_SMA = LAIN	
4	0.050	Jurusan_SMA = IPA	Rerata_SKS = rang...	Asal_Sekolah	Asisten	
4	0.050	Jurusan_SMA = IPA	Asal_Sekolah	Asisten	Rerata_SKS = rang...	
4	0.050	Asal_Sekolah	Asisten	Rerata_SKS = rang...	Jurusan_SMA = LAIN	
5	0.050	Gender	Jurusan_SMA = IPA	Asal_Sekolah	Asisten	Rerata_SKS = rang...
5	0.050	Gender	Asal_Sekolah	Asisten	Rerata_SKS = rang...	Jurusan_SMA = LAIN

b) association rules

table view

<new process*> - RapidMiner Studio gui.license.rapidminer-studio.educational.label 9.0.003 @ DESKTOP-SMR5QMU

File Edit Process View Connections Cloud Settings Extensions Help

Views: Design Results Turbo Prep Auto Model Find data, operators, etc. All Studio

AssociationRules (Create Association Rules) ExampleSet (Nominal to Binomial) ExampleSet (/Local Repository/Tugas)

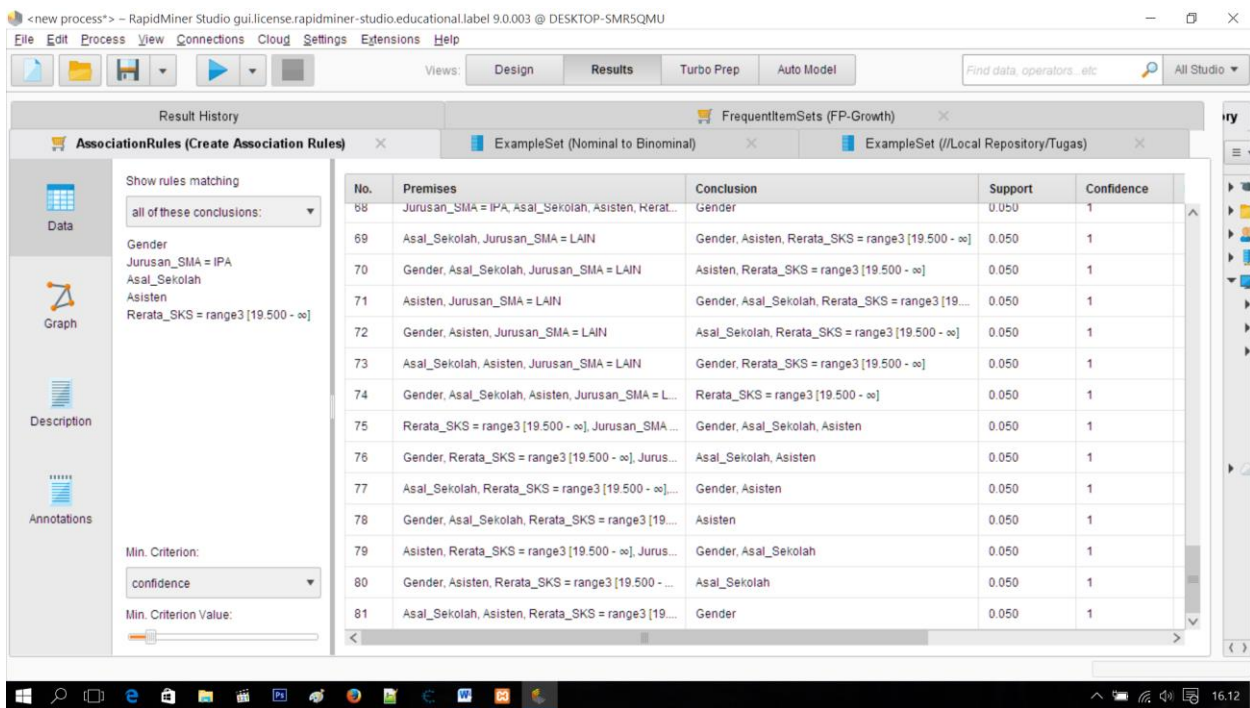
Result History

FrequentItemSets (FP-Growth)

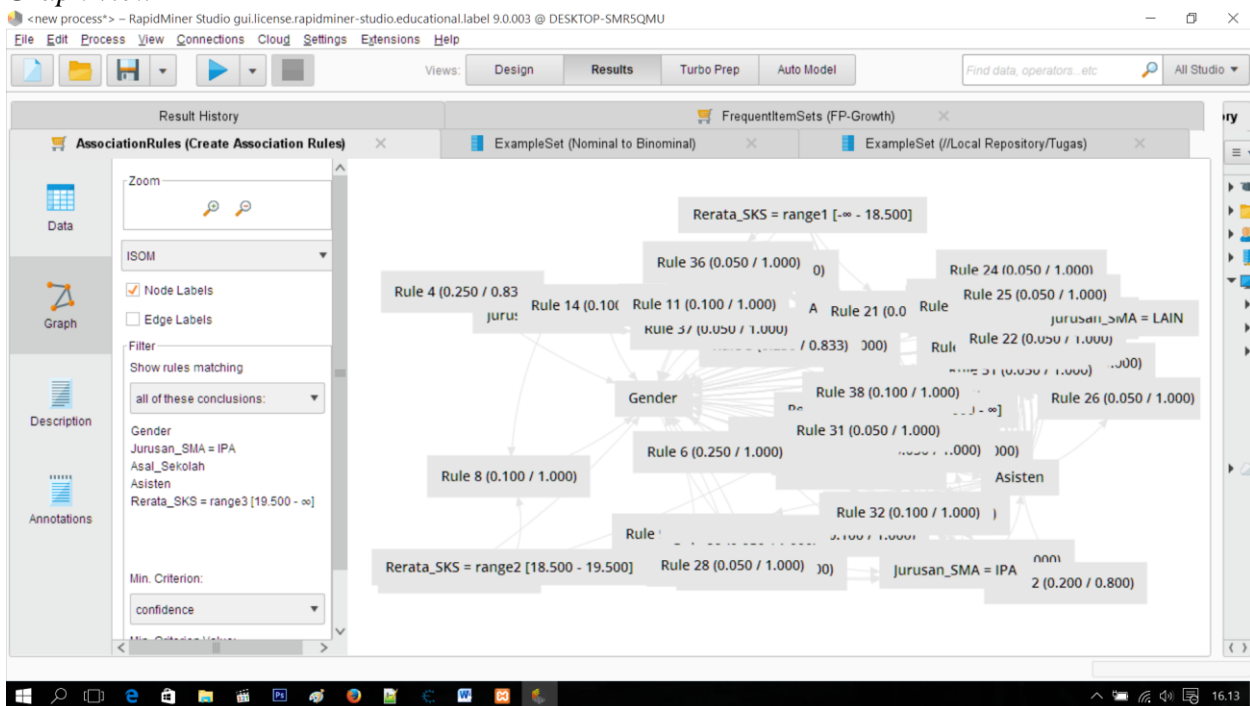
Show rules matching
all of these conclusions:
Gender
Jurusan_SMA = IPA
Asal_Sekolah
Asisten
Rerata_SKS = range3 [19.500 - ∞]

Min. Criterion:
confidence
Min. Criterion Value:

No.	Premises	Conclusion	Support	Confidence
3	Asal_Sekolah	Gender	0.250	0.833
4	Jurusan_SMA = IPS	Gender	0.250	0.833
5	Rerata_SKS = range2 [18.500 - 19.500]	Gender	0.300	0.857
6	Rerata_SKS = range3 [19.500 - ∞]	Gender	0.250	1
7	Jurusan_SMA = IPA, Rerata_SKS = range3 [19.500 - ∞]	Gender	0.100	1
8	Rerata_SKS = range2 [18.500 - 19.500], Jurusan_SMA = IPA	Gender	0.100	1
9	Rerata_SKS = range2 [18.500 - 19.500], Asisten	Gender	0.050	1
10	Rerata_SKS = range2 [18.500 - 19.500], Jurusan_SMA = IPS	Gender	0.050	1
11	Asal_Sekolah, Jurusan_SMA = IPS	Gender	0.100	1
12	Asal_Sekolah, Rerata_SKS = range3 [19.500 - ∞]	Gender	0.150	1
13	Asal_Sekolah, Jurusan_SMA = LAIN	Gender	0.050	1
14	Jurusan_SMA = IPS, Rerata_SKS = range3 [19.500 - ∞]	Gender	0.100	1
15	Asisten, Rerata_SKS = range3 [19.500 - ∞]	Gender	0.150	1
16	Asisten, Jurusan_SMA = LAIN	Gender	0.050	1



Graph view



c)grafik chart

