

Nama : Oki Kus Mahesa  
Nim : L200170064  
Kelas : C

## Aturan Asosiasi

### ❖ Tugas

#### 1. Menggunakan data Lama Studi dengan format DataLamaStudi\_Training

The screenshot shows the Orange3 data mining software interface. The main window displays the 'FrequentItemSets (FP-Growth)' widget, which is used for finding frequent itemsets in a dataset. The widget's 'Result History' tab is active, showing a table of frequent itemsets. The table has columns for 'Size', 'Support', and 'Item 1' through 'Item 5'. The 'Size' column ranges from 2 to 3, and the 'Support' column ranges from 0.050 to 0.250. The 'Item 1' column lists 'Gender', 'Jurusan\_SMA =...', and 'Asal\_Sekolah'. The 'Item 2' column lists 'Rerata\_SKS', 'Jurusan\_SMA =...', 'Asisten', and 'Rerata\_SKS'. The 'Item 3' column lists 'Asal\_Sekolah', 'Rerata\_SKS', and 'Jurusan\_SMA =...'. The 'Item 4' column lists 'Asisten', 'Rerata\_SKS', and 'Jurusan\_SMA =...'. The 'Item 5' column lists 'Asisten', 'Rerata\_SKS', and 'Jurusan\_SMA =...'. The 'Repository' panel on the right shows a list of datasets, including 'Cuaca333', 'Cuaca\_TESTING', 'Cuaca\_TRAINING', 'Cuaca\_TRAINING222', 'Cuaca\_TRAINING\_BARU', 'Cuaca\_TRAINING\_BARUU', 'CuacaTraining', 'data\_lamabelajar', 'Data\_NilaiUjian', 'Data\_NilaiUjian2', 'data\_prediksi', 'data\_tugas', 'DATA\_tugasnilaiujian', 'data\_tugasprediksi', 'DataCuaca\_Training', 'HasilRuleInduction', 'L200170107\_baru', 'MahasiswaTraining', 'Modul6Sekolah\_Training', 'Tabel\_Cuaca\_Testing', and 'Tabel\_NilaiUjian'.

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

2. Pada Operator Descrctize by Frequency memiliki nilai: number of bins=2
- a. Jumlah set aturan assosiasi dan total max size yang terbentuk berdasarkan FP-GROWTH (table view) ! Gambarkan Tabelnya:

	Support	Confidence	LaPlace	Gain	p-s	Lift	Convicti...
	0.250	0.833	0.962	-0.350	0.025	1.111	1.500
	0.250	0.833	0.962	-0.350	0.025	1.111	1.500
	0.250	1	1	-0.250	0.062	1.333	∞
	0.100	1	1	-0.100	0.025	1.333	∞
	0.100	1	1	-0.100	0.025	1.333	∞
	0.150	1	1	-0.150	0.038	1.333	∞
	0.050	1	1	-0.050	0.012	1.333	∞
	0.100	1	1	-0.100	0.025	1.333	∞
	0.150	1	1	-0.150	0.038	1.333	∞
	0.050	1	1	-0.050	0.012	1.333	∞
	0.050	1	1	-0.050	0.012	1.333	∞
	0.100	1	1	-0.100	0.075	4	∞
	0.050	1	1	-0.050	0.038	4	∞
	0.050	1	1	-0.050	0.035	3.333	∞

Jumlah set aturan assosiasi dan total max size yang terbentuk berdasarkan FP-GROWTH (table-view)

//Local Repository/TugasModul6bins2 - RapidMiner Studio Free 9.0.003 @ DESKTOP-7UM84PR  
 File Edit Process View Connections Cloud Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

ExampleSet (Nominal to Binominal) ExampleSet (/Local Repository/CuacaTraining)

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

Data  
 Annotations  
 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
1	0.750	Gender				
1	0.500	Jurusan_SMA = IPA				
2	0.350	Gender	Jurusan_SMA = IPA			
1	0.300	Asal_Sekolah				
1	0.300	Jurusan_SMA = IPS				
1	0.250	Asisten				
1	0.250	Rerata_SKS				
2	0.250	Gender	Asal_Sekolah			
2	0.250	Gender	Jurusan_SMA = IPS			
2	0.250	Gender	Rerata_SKS			
1	0.200	Jurusan_SMA = L...				
2	0.200	Gender	Asisten			
2	0.200	Jurusan_SMA = IPA	Asisten			
2	0.150	Gender	Jurusan_SMA = L...			
2	0.150	Jurusan_SMA = IPA	Asal_Sekolah			

Repository

Import Data

- Cuaca333 (Person - v1, 1)
- Cuaca\_TESTING (Person - v1, 1)
- Cuaca\_TRAINING (Person - v1, 1)
- Cuaca\_TRAINING222 (Person - v1, 1)
- Cuaca\_TRAINING\_BAR (Person - v1, 1)
- Cuaca\_TRAINING\_BAR (Person - v1, 1)
- CuacaTraining (Person - v1, 1)
- data\_lamabelajar (Person - v1, 1)
- Data\_NilaiUjian (Person - v1, 1)
- Data\_NilaiUjian2 (Person - v1, 1)
- data\_prediksi (Person - v1, 1)
- data\_tugas (Person - v1, 1)
- DATA\_tugasnilaiujian (Person - v1, 1)
- data\_tugasprediksi (Person - v1, 1)
- DataCuaca\_Training (Person - v1, 1)
- HasilRuleInduction (Person - v1, 1)
- L200170107\_banu (Person - v1, 1)
- MahasiswaTraining (Person - v1, 1)
- Modul6Sekolah\_Training (Person - v1, 1)
- Tabel\_Cuaca\_Testing (Person - v1, 1)
- Tabel\_NilaiUjian (Person - v1, 1)

6:37 21/11/2019

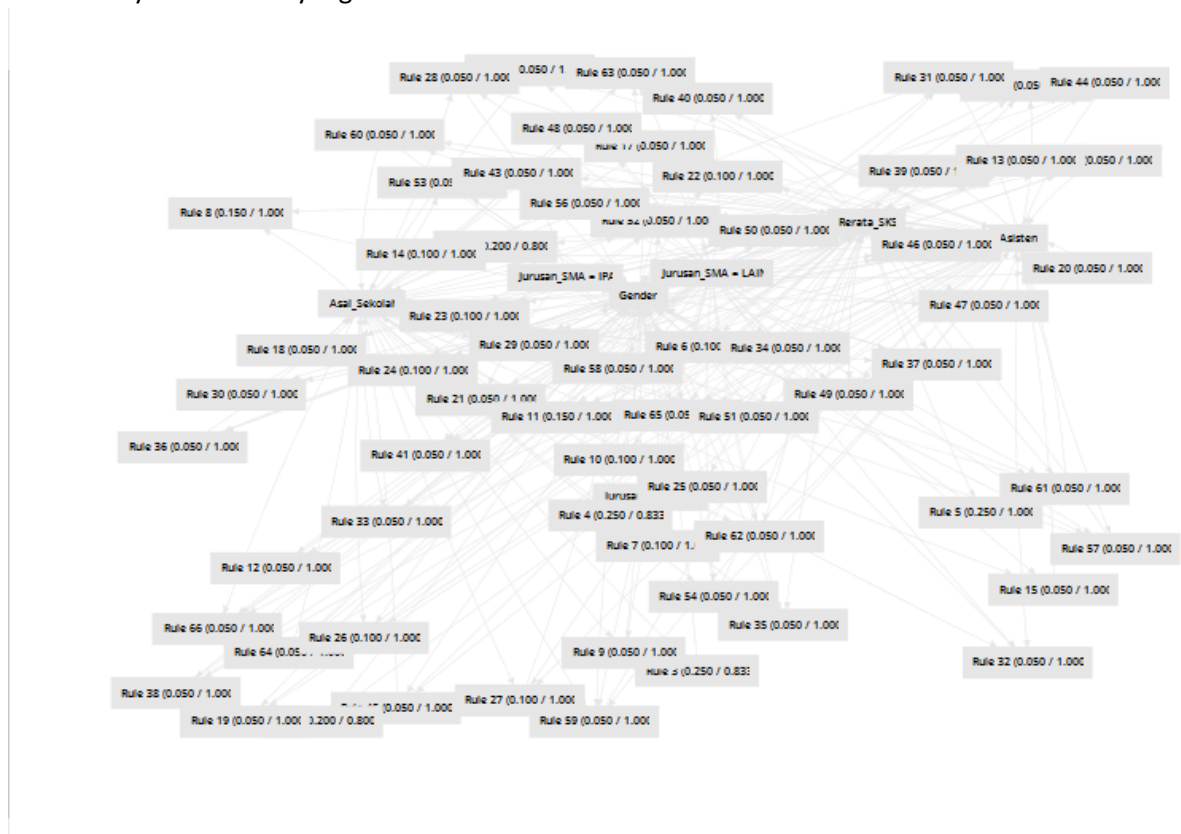
Max Size = 5

Min Size = 1

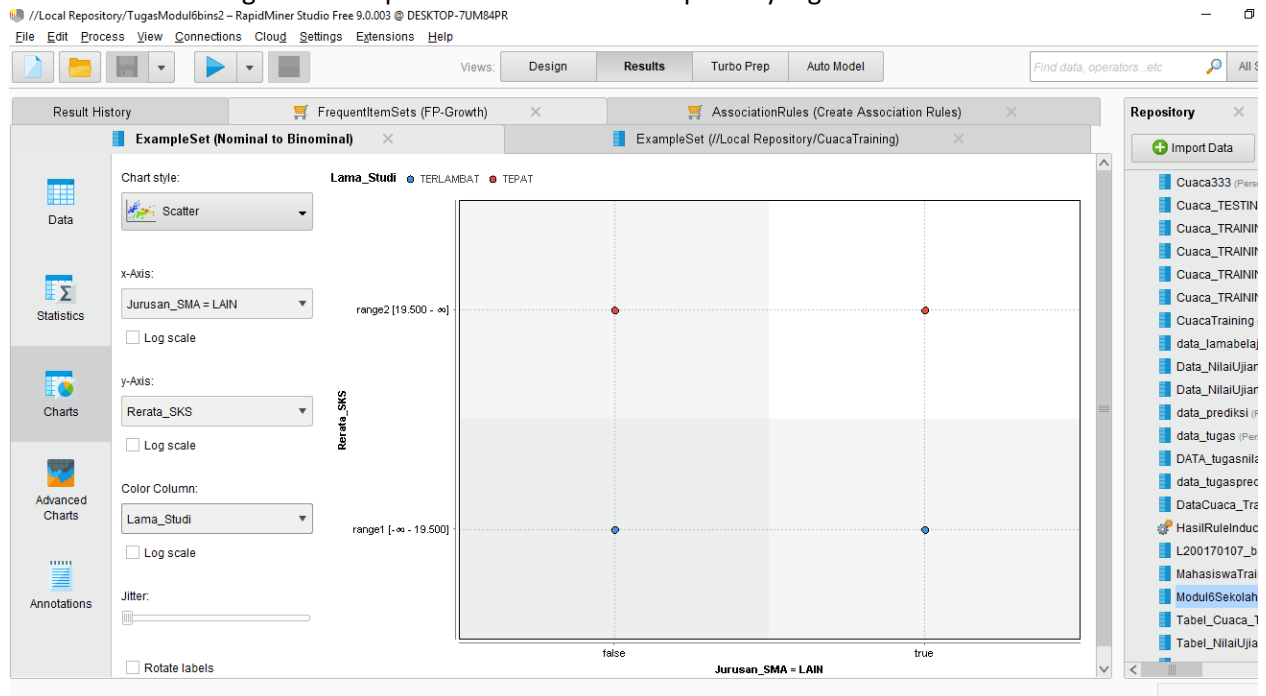
- b. Jumlah data pasangan premis dan kesimpulan pada Association Rules (Create Association Rules)! Gambarkan Tablenya! Gambarkan pula grafik yang terbentuk!

No.	Premises	Conclusion	Support	Conf
44	Asal_Sekolah, Jurusan_SMA = LAIN	Asisten, Rerata_SKS	0.050	1
45	Asisten, Jurusan_SMA = LAIN	Asal_Sekolah, Rerata_SKS	0.050	1
46	Asal_Sekolah, Asisten, Jurusan_SMA = LAIN	Rerata_SKS	0.050	1
47	Rerata_SKS, Jurusan_SMA = LAIN	Asal_Sekolah, Asisten	0.050	1
48	Asal_Sekolah, Rerata_SKS, Jurusan_SMA = LAIN	Asisten	0.050	1
49	Asisten, Rerata_SKS, Jurusan_SMA = LAIN	Asal_Sekolah	0.050	1
50	Gender, Jurusan_SMA = IPA, Asal_Sekolah, Asisten	Rerata_SKS	0.050	1
51	Jurusan_SMA = IPA, Asal_Sekolah, Rerata_SKS	Gender, Asisten	0.050	1
52	Gender, Jurusan_SMA = IPA, Asal_Sekolah, Rerata...	Asisten	0.050	1
53	Jurusan_SMA = IPA, Asal_Sekolah, Asisten, Rerata...	Gender	0.050	1
54	Asal_Sekolah, Jurusan_SMA = LAIN	Gender, Asisten, Rerata_SKS	0.050	1
55	Gender, Asal_Sekolah, Jurusan_SMA = LAIN	Asisten, Rerata_SKS	0.050	1
56	Asisten, Jurusan_SMA = LAIN	Gender, Asal_Sekolah, Rerata_SKS	0.050	1
57	Gender, Asisten, Jurusan_SMA = LAIN	Asal_Sekolah, Rerata_SKS	0.050	1
58	Asal_Sekolah, Asisten, Jurusan_SMA = LAIN	Gender, Rerata_SKS	0.050	1

Grafik Penyebaran data yang terbentuk



c. Gambarkan grafik chart pola distribusi data exampleSet yang terbentuk



3. Pada Operator Descretize by Frequency memiliki nilai: number of bins=1

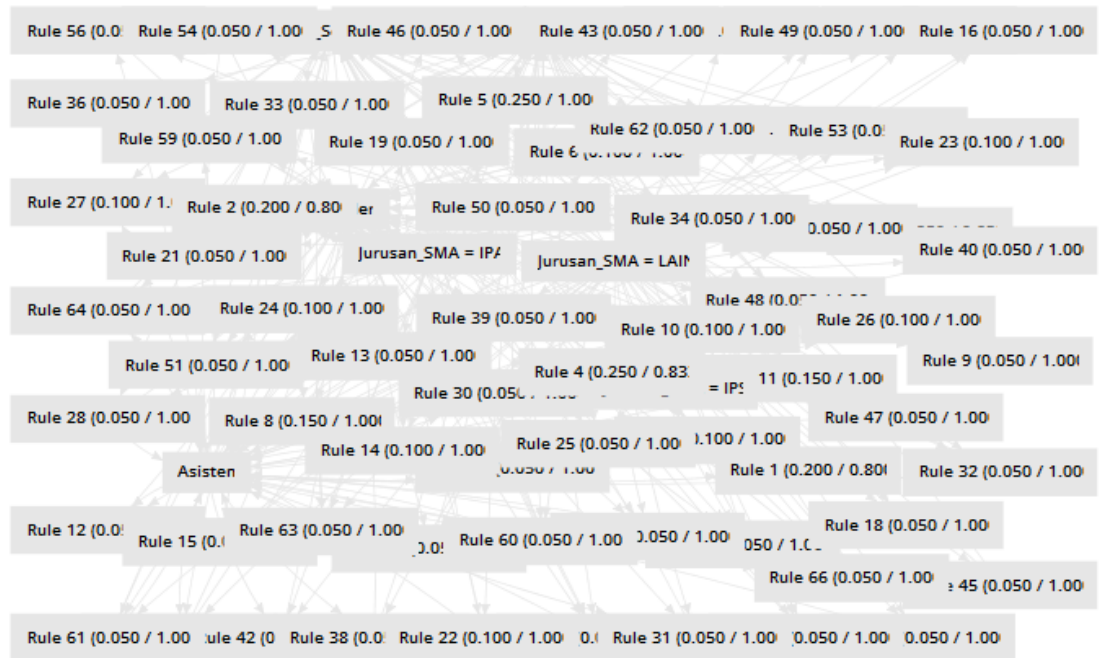
a. Jumlah set aturan assosiasi dan total max size yang terbentuk berdasarkan FP-GROWTH (table view) ! Gambarkan Tabelnya:

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

b. Jumlah data pasangan premis dan kesimpulan pada Association Rules (Create Association Rules)! Gambarkan Tabelnya! Gambarkan pula grafik yang terbentuk!

No.	Premises	Conclusion	Support	Cor
52	Gender, Jurusan_SMA = IPA, Asal_Sekolah, Rerat...	Asisten	0.050	1
53	Jurusan_SMA = IPA, Asal_Sekolah, Asisten, Rerat...	Gender	0.050	1
54	Asal_Sekolah, Jurusan_SMA = LAIN	Gender, Asisten, Rerata_SKS	0.050	1
55	Gender, Asal_Sekolah, Jurusan_SMA = LAIN	Asisten, Rerata_SKS	0.050	1
56	Asisten, Jurusan_SMA = LAIN	Gender, Asal_Sekolah, Rerata_SKS	0.050	1
57	Gender, Asisten, Jurusan_SMA = LAIN	Asal_Sekolah, Rerata_SKS	0.050	1
58	Asal_Sekolah, Asisten, Jurusan_SMA = LAIN	Gender, Rerata_SKS	0.050	1
59	Gender, Asal_Sekolah, Asisten, Jurusan_SMA = L...	Rerata_SKS	0.050	1
60	Rerata_SKS, Jurusan_SMA = LAIN	Gender, Asal_Sekolah, Asisten	0.050	1
61	Gender, Rerata_SKS, Jurusan_SMA = LAIN	Asal_Sekolah, Asisten	0.050	1
62	Asal_Sekolah, Rerata_SKS, Jurusan_SMA = LAIN	Gender, Asisten	0.050	1
63	Gender, Asal_Sekolah, Rerata_SKS, Jurusan_SMA...	Asisten	0.050	1
64	Asisten, Rerata_SKS, Jurusan_SMA = LAIN	Gender, Asal_Sekolah	0.050	1
65	Gender, Asisten, Rerata_SKS, Jurusan_SMA = LAIN	Asal_Sekolah	0.050	1
66	Asal_Sekolah, Asisten, Rerata_SKS, Jurusan_SMA...	Gender	0.050	1

## Grafik Penyebaran data yang terbentuk



c. Gambarkan grafik chart pola distribusi data exampleSet yang terbentuk

