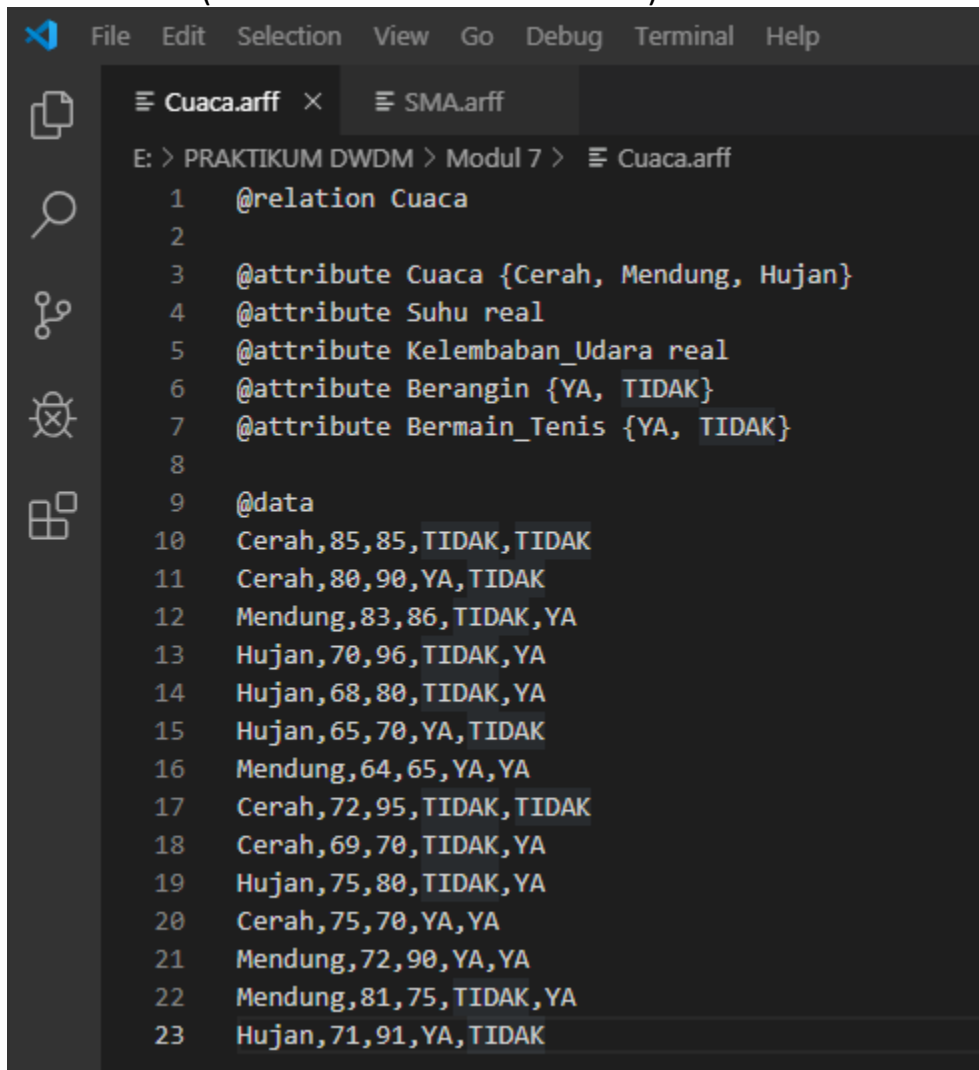


Name : Ridho Achmad F  
NIM : L200174005  
Class : X

## Practicum Report Module 7

Example:

1. Create ARFF (Attribut-Relation File Format) Data Format



```
File Edit Selection View Go Debug Terminal Help
Cuaca.arff x SMA.arff
E: > PRAKTIKUM DWDM > Modul 7 > Cuaca.arff
1 @relation Cuaca
2
3 @attribute Cuaca {Cerah, Mendung, Hujan}
4 @attribute Suhu real
5 @attribute Kelembaban_Udara real
6 @attribute Berangin {YA, TIDAK}
7 @attribute Bermain_Tenis {YA, TIDAK}
8
9 @data
10 Cerah,85,85,TIDAK,TIDAK
11 Cerah,80,90,YA,TIDAK
12 Mendung,83,86,TIDAK,YA
13 Hujan,70,96,TIDAK,YA
14 Hujan,68,80,TIDAK,YA
15 Hujan,65,70,YA,TIDAK
16 Mendung,64,65,YA,YA
17 Cerah,72,95,TIDAK,TIDAK
18 Cerah,69,70,TIDAK,YA
19 Hujan,75,80,TIDAK,YA
20 Cerah,75,70,YA,YA
21 Mendung,72,90,YA,YA
22 Mendung,81,75,TIDAK,YA
23 Hujan,71,91,YA,TIDAK
```

## 2. With Weka use the ARFF File Attribute Cuaca

Weka Explorer

Preprocess | Classify | Cluster | Associate | Select attributes | Visualize

Open file... Open URL... Open DB... Generate... Undo Edit... Save...

Filter  
Choose **None** Apply

Current relation  
Relation: Cuaca  
Instances: 14  
Attributes: 5  
Sum of weights: 14

Attributes  
All None Invert Pattern

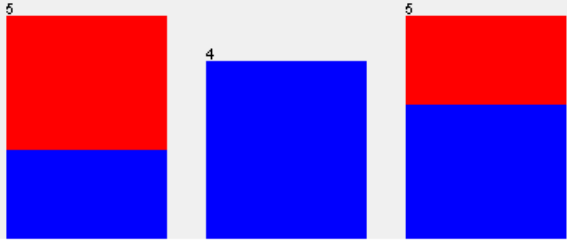
No.	Name
1	<input checked="" type="checkbox"/> Cuaca
2	<input type="checkbox"/> Suhu
3	<input type="checkbox"/> Kelembaban_Udara
4	<input type="checkbox"/> Berangin
5	<input type="checkbox"/> Bermain_Tenis

Remove

Selected attribute  
Name: Cuaca  
Missing: 0 (0%)  
Distinct: 3  
Type: Nominal  
Unique: 0 (0%)

No.	Label	Count	Weight
1	Cerah	5	5.0
2	Mendung	4	4.0
3	Hujan	5	5.0

Class: Bermain\_Tenis (Nom) Visualize All



Status  
OK Log x 0

## Attribute Suhu

**Weka Explorer**

Preprocess | Classify | Cluster | Associate | Select attributes | Visualize

Open file... Open URL... Open DB... Generate... Undo Edit... Save...

Filter: Choose **None** Apply

Current relation  
Relation: Cuaca  
Instances: 14  
Attributes: 5  
Sum of weights: 14

Attributes  
All None Invert Pattern

No.	Name
1	<input type="checkbox"/> Cuaca
2	<input checked="" type="checkbox"/> Suhu
3	<input type="checkbox"/> Kelembaban_Udara
4	<input type="checkbox"/> Berangin
5	<input type="checkbox"/> Bermain_Tenis

Remove

Selected attribute  
Name: Suhu  
Missing: 0 (0%)  
Distinct: 12  
Type: Numeric  
Unique: 10 (71%)

Statistic	Value
Minimum	64
Maximum	85
Mean	73.571
StdDev	6.572

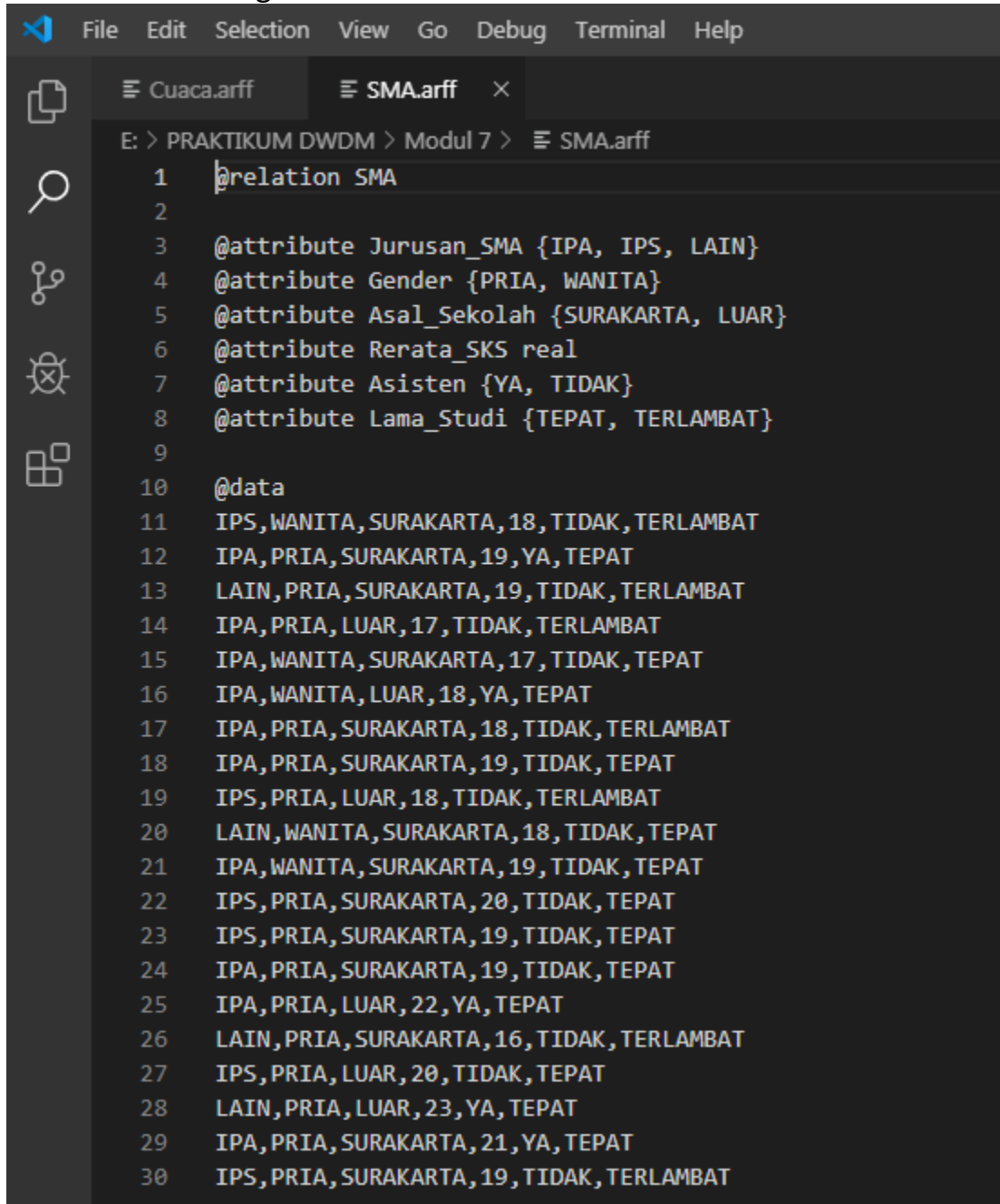
Class: Bermain\_Tenis (Nom) Visualize All

8 6 64 74.5 85

Status OK Log x 0

## Assignment

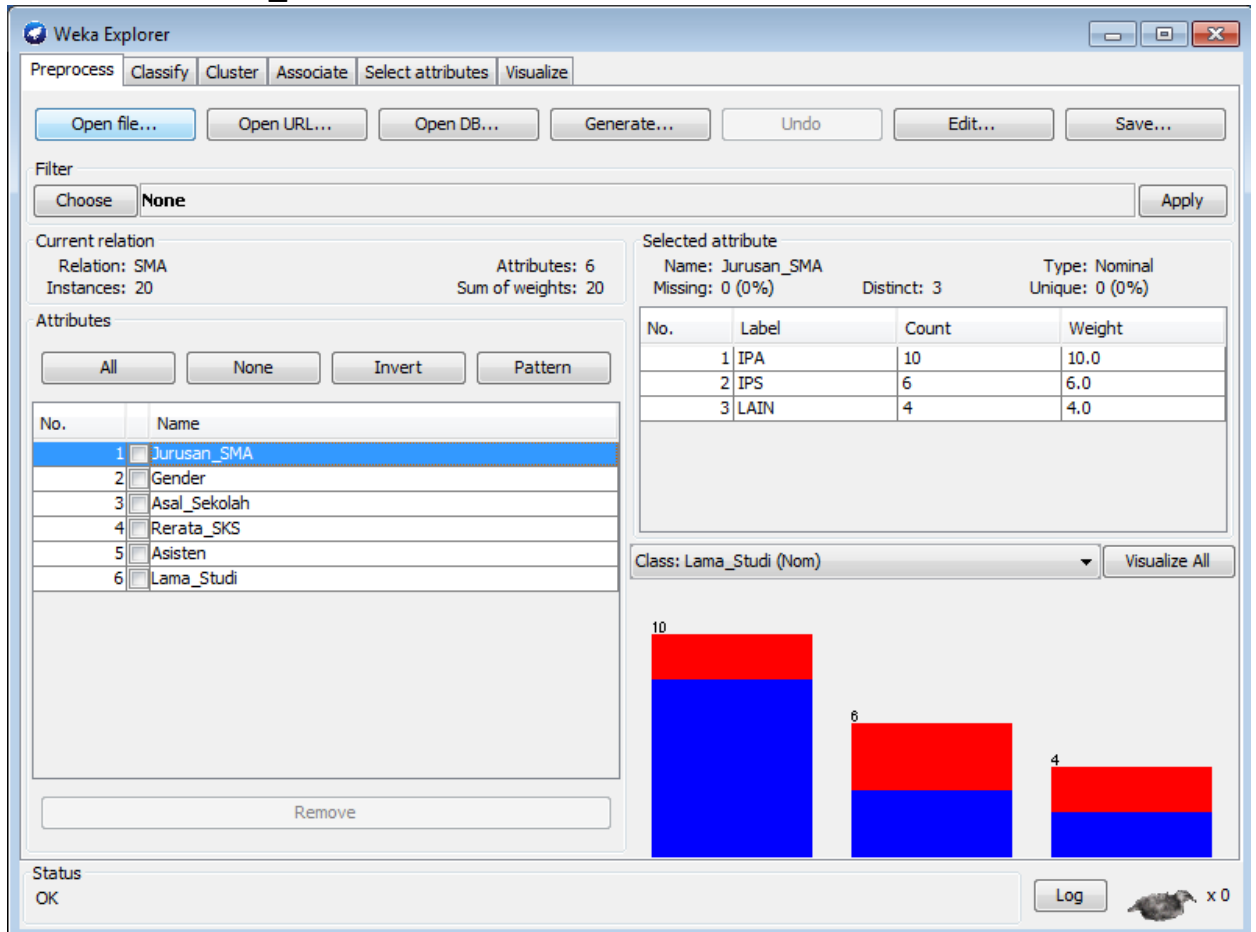
### 1. File ARFF according to Module 6



```
1 relation SMA
2
3 @attribute Jurusan_SMA {IPA, IPS, LAIN}
4 @attribute Gender {PRIA, WANITA}
5 @attribute Asal_Sekolah {SURAKARTA, LUAR}
6 @attribute Rerata_SKS real
7 @attribute Asisten {YA, TIDAK}
8 @attribute Lama_Studi {TEPAT, TERLAMBAT}
9
10 @data
11 IPS,WANITA,SURAKARTA,18,TIDAK,TERLAMBAT
12 IPA,PRIA,SURAKARTA,19,YA,TEPAT
13 LAIN,PRIA,SURAKARTA,19,TIDAK,TERLAMBAT
14 IPA,PRIA,LUAR,17,TIDAK,TERLAMBAT
15 IPA,WANITA,SURAKARTA,17,TIDAK,TEPAT
16 IPA,WANITA,LUAR,18,YA,TEPAT
17 IPA,PRIA,SURAKARTA,18,TIDAK,TERLAMBAT
18 IPA,PRIA,SURAKARTA,19,TIDAK,TEPAT
19 IPS,PRIA,LUAR,18,TIDAK,TERLAMBAT
20 LAIN,WANITA,SURAKARTA,18,TIDAK,TEPAT
21 IPA,WANITA,SURAKARTA,19,TIDAK,TEPAT
22 IPS,PRIA,SURAKARTA,20,TIDAK,TEPAT
23 IPS,PRIA,SURAKARTA,19,TIDAK,TEPAT
24 IPA,PRIA,SURAKARTA,19,TIDAK,TEPAT
25 IPA,PRIA,LUAR,22,YA,TEPAT
26 LAIN,PRIA,SURAKARTA,16,TIDAK,TERLAMBAT
27 IPS,PRIA,LUAR,20,TIDAK,TEPAT
28 LAIN,PRIA,LUAR,23,YA,TEPAT
29 IPA,PRIA,SURAKARTA,21,YA,TEPAT
30 IPS,PRIA,SURAKARTA,19,TIDAK,TERLAMBAT
```

## 2. Grafik Picture for every single data in Weka

### Attribute Jurusan\_SMA



## Attribute Gender

**Weka Explorer**

Preprocess | **Classify** | Cluster | Associate | Select attributes | Visualize

Open file... Open URL... Open DB... Generate... Undo Edit... Save...

Filter: Choose **None** Apply

Current relation  
Relation: SMA  
Instances: 20  
Attributes: 6  
Sum of weights: 20

Attributes: All None Invert Pattern

No.	Name
1	<input type="checkbox"/> Jurusan_SMA
2	<input checked="" type="checkbox"/> Gender
3	<input type="checkbox"/> Asal_Sekolah
4	<input type="checkbox"/> Rerata_SKS
5	<input type="checkbox"/> Asisten
6	<input type="checkbox"/> Lama_Studi

Remove

Selected attribute  
Name: Gender  
Missing: 0 (0%)  
Distinct: 2  
Type: Nominal  
Unique: 0 (0%)

No.	Label	Count	Weight
1	PRIA	15	15.0
2	WANITA	5	5.0

Class: Lama\_Studi (Nom) Visualize All

15

5

Status: OK Log x 0

## Attribute Asal\_Sekolah

**Weka Explorer**

Preprocess | **Classify** | Cluster | Associate | Select attributes | Visualize

Open file... Open URL... Open DB... Generate... Undo Edit... Save...

Filter: Choose **None** Apply

Current relation  
Relation: SMA  
Instances: 20  
Attributes: 6  
Sum of weights: 20

Attributes: All None Invert Pattern

No.	Name
1	Jurusan_SMA
2	Gender
3	Asal_Sekolah
4	Rerata_SKS
5	Asisten
6	Lama_Studi

Remove

Selected attribute  
Name: Asal\_Sekolah  
Missing: 0 (0%)  
Distinct: 2  
Type: Nominal  
Unique: 0 (0%)

No.	Label	Count	Weight
1	SURAKARTA	14	14.0
2	LUAR	6	6.0

Class: Lama\_Studi (Nom) Visualize All

Status: OK Log x 0

## Attribute Rerata\_SKS

**Weka Explorer**

Preprocess | **Classify** | Cluster | Associate | Select attributes | Visualize

Open file... Open URL... Open DB... Generate... Undo Edit... Save...

Filter: Choose **None** Apply

Current relation  
Relation: SMA  
Instances: 20  
Attributes: 6  
Sum of weights: 20

Attributes: All None Invert Pattern

No.	Name
1	<input type="checkbox"/> Jurusan_SMA
2	<input type="checkbox"/> Gender
3	<input type="checkbox"/> Asal_Sekolah
4	<input checked="" type="checkbox"/> Rerata_SKS
5	<input type="checkbox"/> Asisten
6	<input type="checkbox"/> Lama_Studi

Remove

Selected attribute  
Name: Rerata\_SKS  
Missing: 0 (0%)  
Distinct: 8  
Type: Numeric  
Unique: 4 (20%)

Statistic	Value
Minimum	16
Maximum	23
Mean	18.95
StdDev	1.669

Class: Lama\_Studi (Nom) Visualize All

8 9 3

16 19.5 23

Status: OK Log x 0



## Attribute Asisten

**Weka Explorer**

Preprocess | Classify | Cluster | Associate | Select attributes | Visualize

Open file... Open URL... Open DB... Generate... Undo Edit... Save...

Filter: Choose **None** Apply

Current relation  
Relation: SMA  
Instances: 20  
Attributes: 6  
Sum of weights: 20

Attributes  
All None Invert Pattern

No.	Name
1	<input type="checkbox"/> Jurusan_SMA
2	<input type="checkbox"/> Gender
3	<input type="checkbox"/> Asal_Sekolah
4	<input type="checkbox"/> Rerata_SKS
5	<input checked="" type="checkbox"/> Asisten
6	<input type="checkbox"/> Lama_Studi

Remove

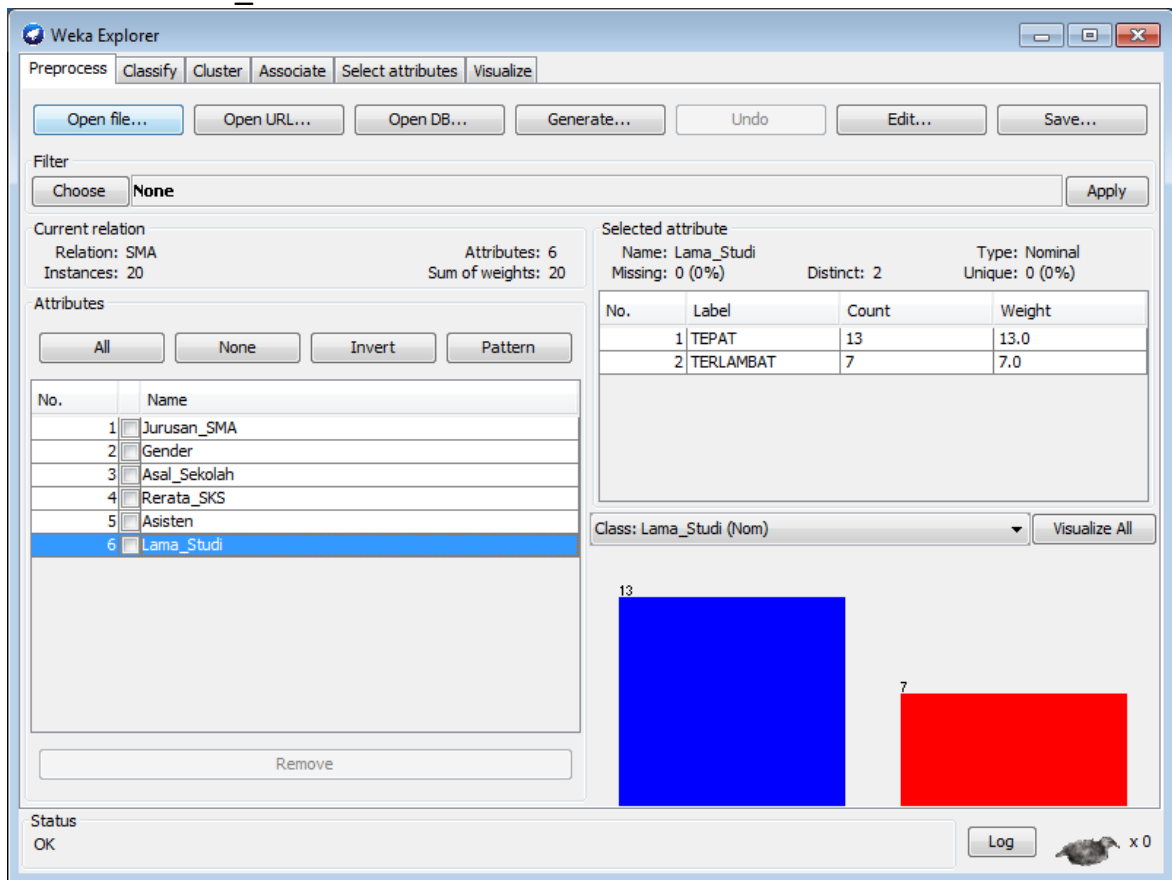
Selected attribute  
Name: Asisten  
Missing: 0 (0%)  
Distinct: 2  
Type: Nominal  
Unique: 0 (0%)

No.	Label	Count	Weight
1	YA	5	5.0
2	TIDAK	15	15.0

Class: Lama\_Studi (Nom) Visualize All

Status: OK Log x 0

## Attribute Lama\_Studi



3. Attribute that have a binomial type: 4  
Attribute that have a polynomial type : 1
4. Attribute that have a real type : 1
5. On attribute Rerata\_SKS:  
Maximum Value : 23  
Minimum Value : 16  
Mean Value : 18.95  
Standard Deviation Value : 1.669