

Laporan Praktikum DWDM

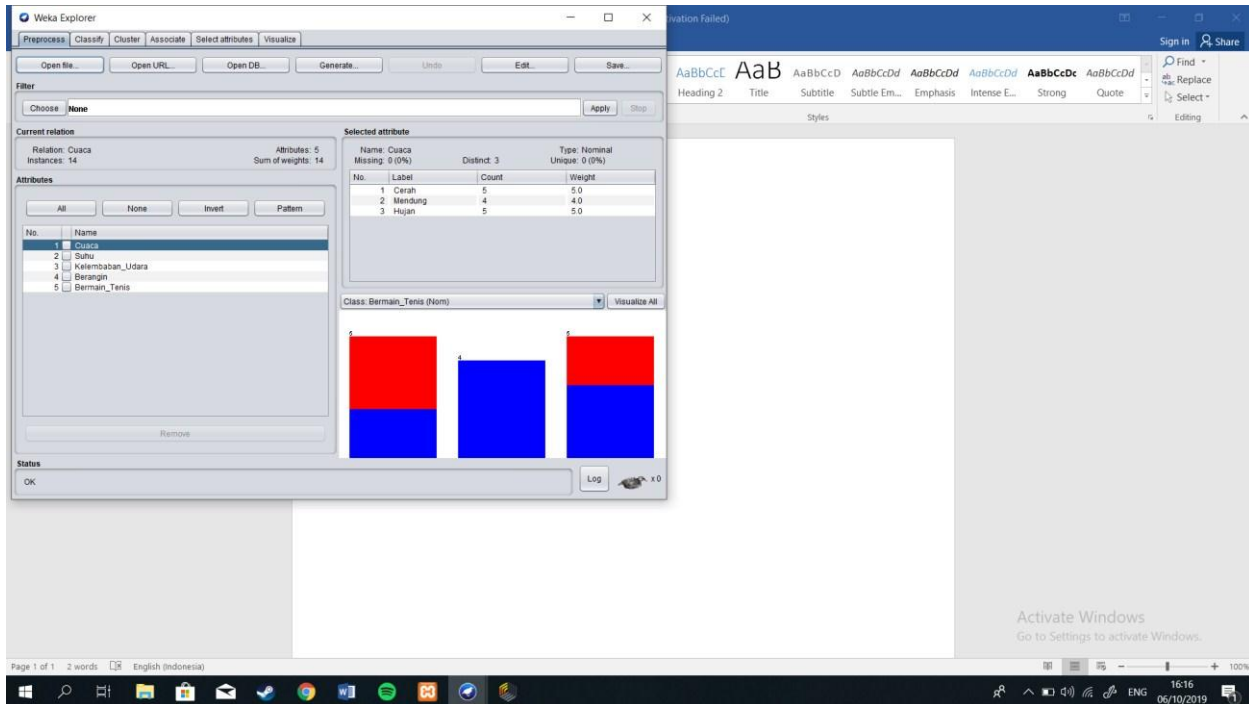
Nama : Moch Afif Abdillah

NIM : L200170004

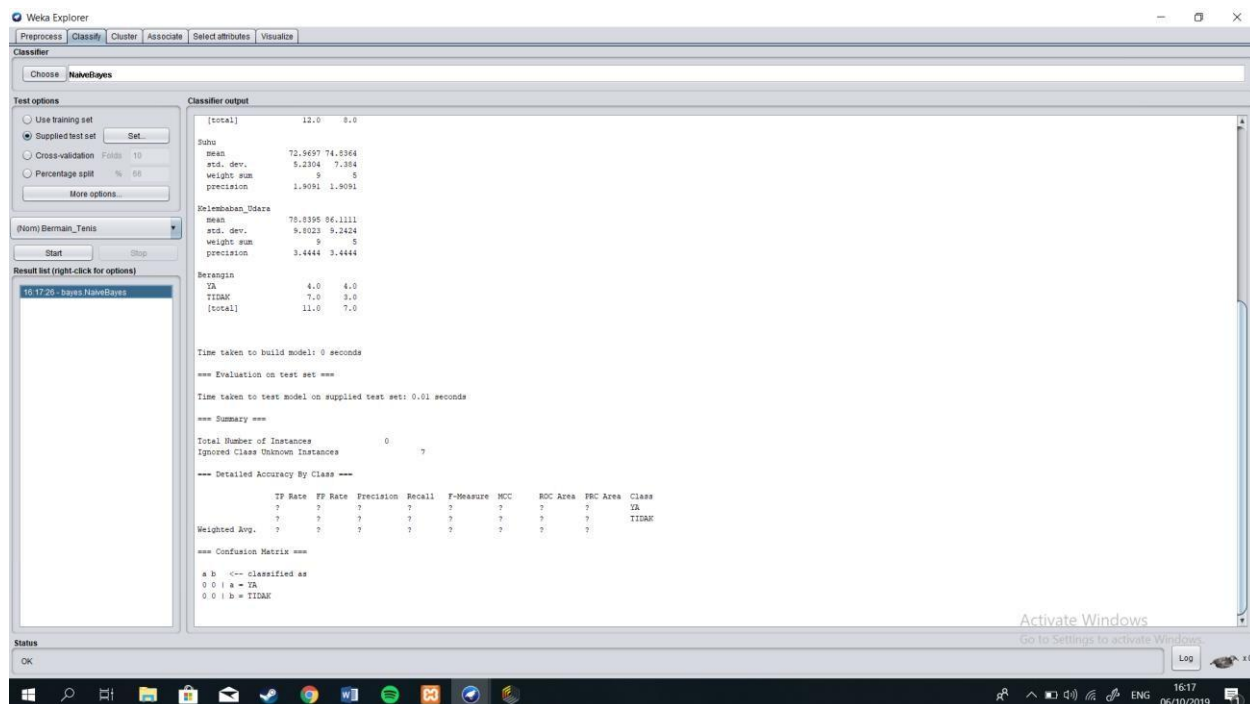
Kelas : A

Langkah

8.4 5.



14.



19.

The screenshot shows two windows. The left window is 'ARFF-Viewer' displaying a table of weather data with columns: Cuaca, Suhu, Kelembaban_Udara, Berangin, prediction margin, predicted Bermain_Tenis, and Bermain_Tenis. The right window is 'Notepad' showing the ARFF representation of the data.

ARFF-Viewer Data:

No.	1: Cuaca	2: Suhu	3: Kelembaban_Udara	4: Berangin	5: prediction margin	6: predicted Bermain_Tenis	7: Bermain_Tenis
1	Cerah	75.0	85.0	TIDAK	0.762765	YA	
2	Cerah	80.0	88.0	YA	0.087878	YA	
3	Cerah	83.0	87.0	YA	-0.876866	TIDAK	
4	Mend.	70.0	96.0	TIDAK	0.628523	YA	
5	Mend.	68.0	81.0	TIDAK	0.833996	YA	
6	Hujan	65.0	70.0	YA	0.253733	YA	
7	Hujan	64.0	85.0	YA	-0.160143	TIDAK	

Notepad ARFF Representation:

```

relation Cuaca_predicted
    attribute Cuaca {Cerah,Mendung,Hujan}
    attribute Suhu numeric
    attribute Kelembaban_Udara numeric
    attribute Berangin {YA,TIDAK}
    attribute 'prediction margin' numeric
    attribute 'predicted Bermain_Tenis' {YA,TIDAK}
    attribute Bermain_Tenis {YA,TIDAK}

a
h,75,65,TIDAK,0.762765,YA,?
h,80,68,YA,0.087878,YA,?
h,83,87,YA,-0.876866,TIDAK,?
h,70,96,TIDAK,0.628523,YA,?
h,68,81,TIDAK,0.833996,YA,?
h,65,75,YA,0.253733,YA,?
h,64,85,YA,-0.160143,TIDAK,?
  
```

8.4.2 1.

The screenshot shows a Microsoft Excel spreadsheet titled 'Tabel_Cuaca - Excel (Product Activation Failed)'. The data is organized into columns: A (Cuaca), B (Suhu), C (Kelembaban), D (Berangin), and E (Bermain_Tenis). The rows correspond to the data points from the ARFF-Viewer.

	A	B	C	D	E
1	Cuaca	Suhu	Kelembaban	Berangin	Bermain_Tenis
2	Cerah	85	85	TIDAK	TIDAK
3	Cerah	80	90	YA	TIDAK
4	Mendung	83	86	TIDAK	YA
5	Hujan	70	96	TIDAK	YA
6	Hujan	68	80	TIDAK	YA
7	Hujan	65	70	YA	TIDAK
8	Mendung	64	65	YA	YA
9	Cerah	72	95	TIDAK	TIDAK
10	Cerah	69	70	TIDAK	YA
11	Hujan	75	80	TIDAK	YA
12	Cerah	75	70	YA	YA
13	Mendung	72	90	YA	YA
14	Mendung	81	75	TIDAK	YA
15	Hujan	71	91	YA	TIDAK

Tabel_Cuaca - Excel (Product Activation failed)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	Cuaca	Suhu	Kelembaban	Berawan																		
2	Cerah	75	65	TIDAK																		
3	Cerah	80	68	YA																		
4	Cerah	83	87	YA																		
5	Mendung	70	96	TIDAK																		
6	Mendung	68	81	TIDAK																		
7	Hujan	65	75	YA																		
8	Hujan	64	85	YA																		
9																						
10																						
11																						
12																						
13																						
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30																						

Activate Windows
Go to Settings to activate Windows.

Modul 8

Import Data - Select the data location.

Select the data location.

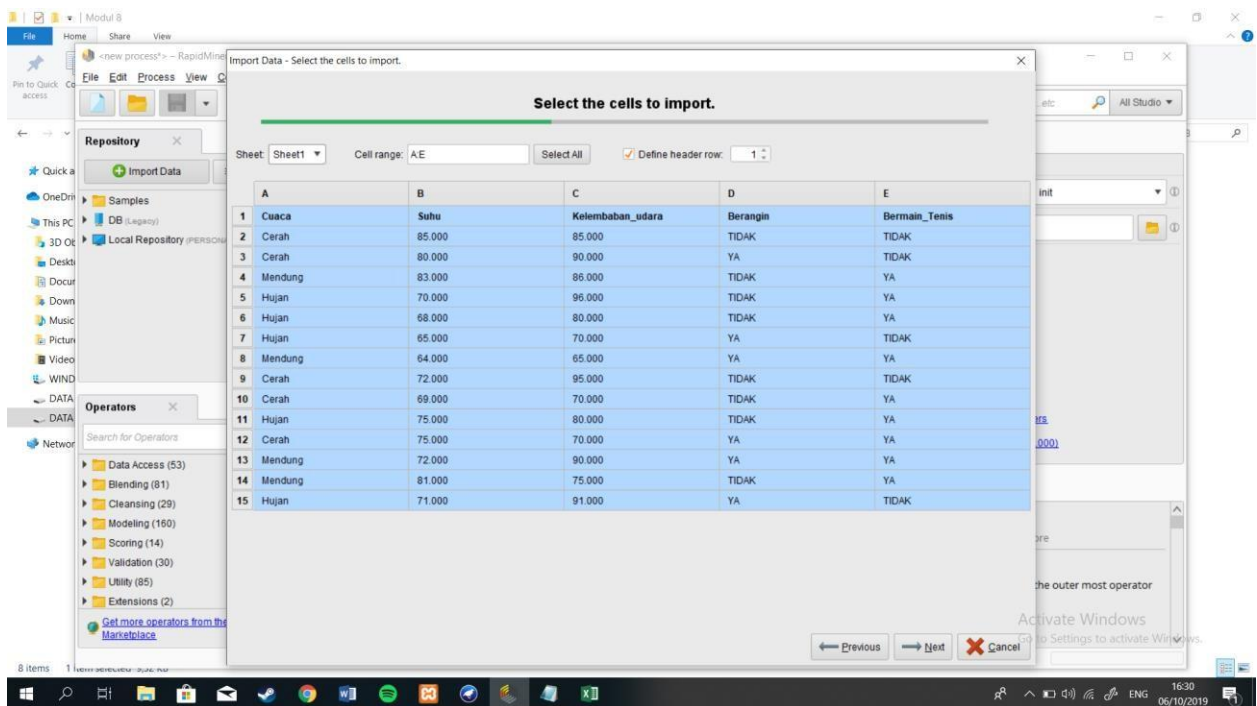
File Name	Size	Type	Last Modified
Cuaca.arff	1 KB	ARFF Data File	Oct 2, 2019
CuacaTesting.arff	1 KB	ARFF Data File	Oct 2, 2019
DATATestingSMA.arff	1 KB	ARFF Data File	Oct 2, 2019
DATATrainingSMA.arff	1 KB	ARFF Data File	Oct 2, 2019
HasilData.arff	1 KB	ARFF Data File	Oct 2, 2019
HasilPrediksi.arff	1 KB	ARFF Data File	Oct 2, 2019
SMA_Testing.xlsx	11 KB	Microsoft Excel Worksheet	Oct 2, 2019
Tabel_Cuaca.xlsx	9 KB	Microsoft Excel Worksheet	Oct 2, 2019

Tabel_Cuaca.xlsx

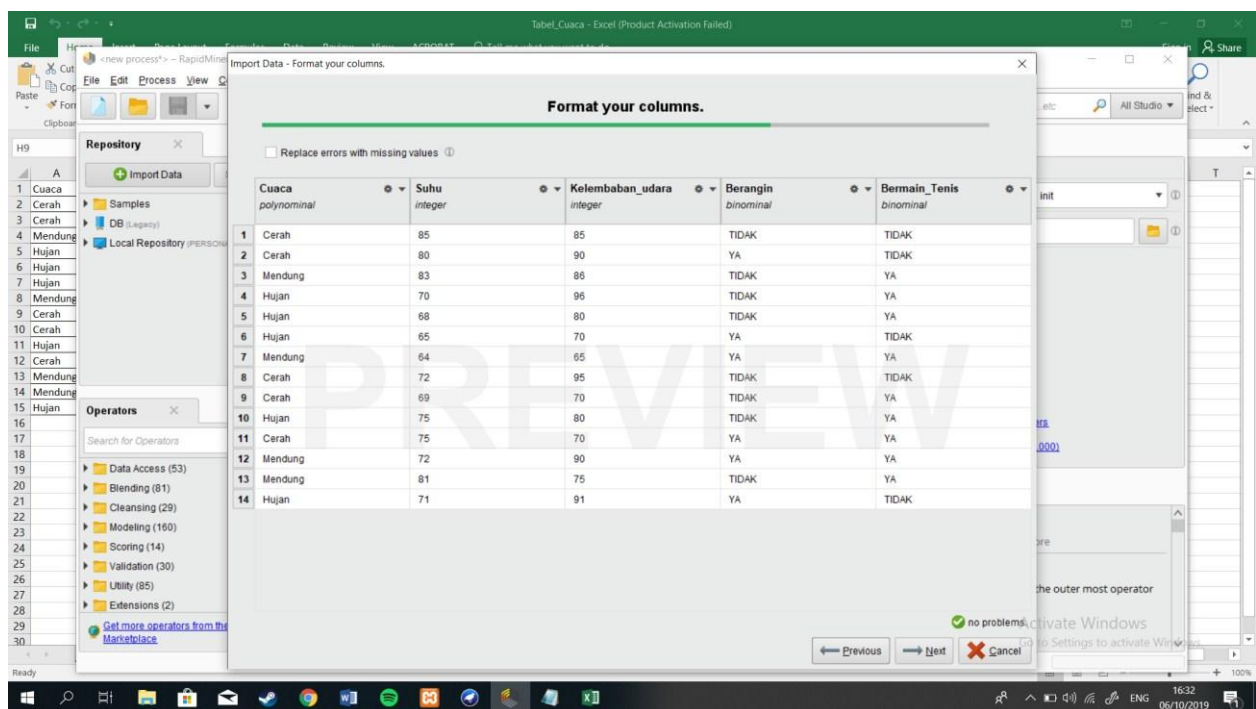
All Files

The selected file will be imported as: Excel [Change](#)

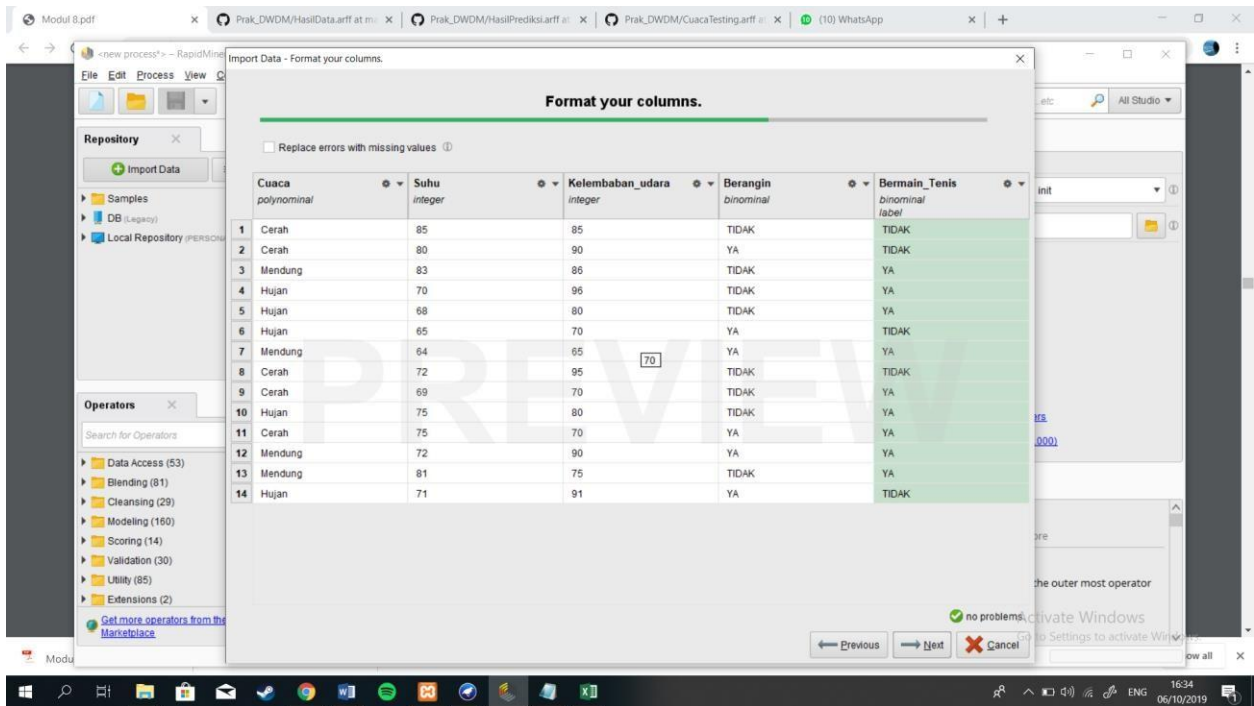
Previous Next Cancel



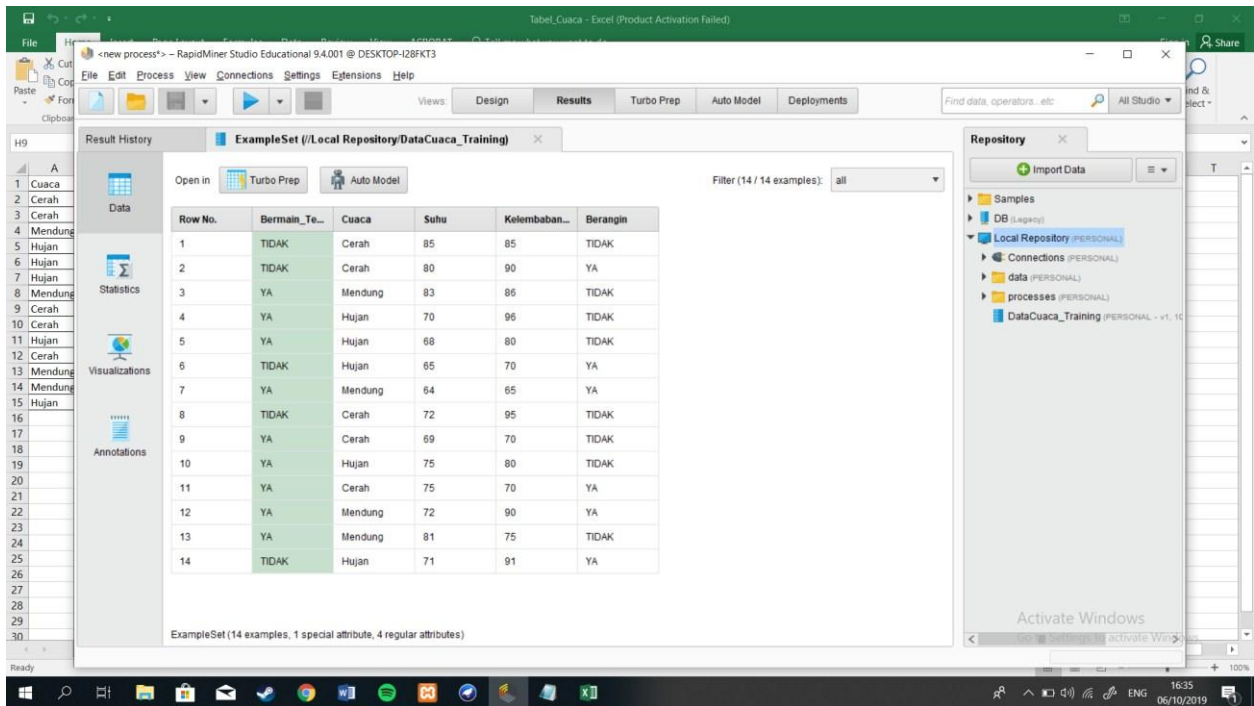
7.



8.



10.



13.

Modul 8.pdf x Prak_DWDM/HasilData.arff x Prak_DWDM/HasilPrediksi... x Prak_DWDM/CuacaTesting... x (10) WhatsApp x New Tab

<new process> - RapidMiner Studio Educational 9.4.001 @ DESKTOP-128FKT3

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model Deployments

Find data, operators, etc. All Studio

Result History: ExampleSet (/Local Repository/DataCuaca_Testing) x ExampleSet (/Local Repository/DataCuaca_Training) x

Open in: Turbo Prep Auto Model

Filter (7 / 7 examples): all

Row No.	Berangin	Cuaca	Suhu	Kelembaban...
1	TIDAK	Cerah	75	65
2	YA	Cerah	80	68
3	YA	Cerah	83	87
4	TIDAK	Mendung	70	96
5	TIDAK	Mendung	68	81
6	YA	Hujan	65	75
7	YA	Hujan	64	85

ExampleSet (7 examples, 1 special attribute, 3 regular attributes)

Repository: Import Data

- Samples
- DB (Legacy)
- Local Repository (PERSONAL)
 - Connections (PERSONAL)
 - data (PERSONAL)
 - processes (PERSONAL)
 - DataCuaca_Testing (PERSONAL - v1.15)
 - DataCuaca_Training (PERSONAL - v1.15)

Activate Windows

Modul 8.pdf

16:56 06/10/2019

15.

Modul 8.pdf x Prak_DWDM/HasilData.arff x Prak_DWDM/HasilPrediksi... x Prak_DWDM/CuacaTesting... x (10) WhatsApp x New Tab

<new process> - RapidMiner Studio Educational 9.4.001 @ DESKTOP-128FKT3

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model Deployments

Find data, operators, etc. All Studio

Repository: Import Data

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 - DataCuaca_Testing (PERSONAL - v1.15)
 - DataCuaca_Training (PERSONAL - v1.15)

Operators: apply mo

- Modeling (1)
 - Time Series (1)
 - Forecasting (1)
 - Apply Forecast
 - Scoring (1)
 - Apply Model

We found "Shapelet" in the Marketplace [Show me!](#)

Process: 100%

Process:

```

graph LR
    A[Retrieve DataCuaca...] --> B[Naive Bayes]
    A --> C[Apply Model]
    B --> C
    C --> D[Apply Model]
  
```

Parameters: Process

logverbosity: init

logfile:

Show advanced parameters

Change compatibility (9.4.000)

Help: Process

RapidMiner Studio Core

Synopsis: The root operator which is the outer most operator of every process.

Description: Go to Settings to activate Windows

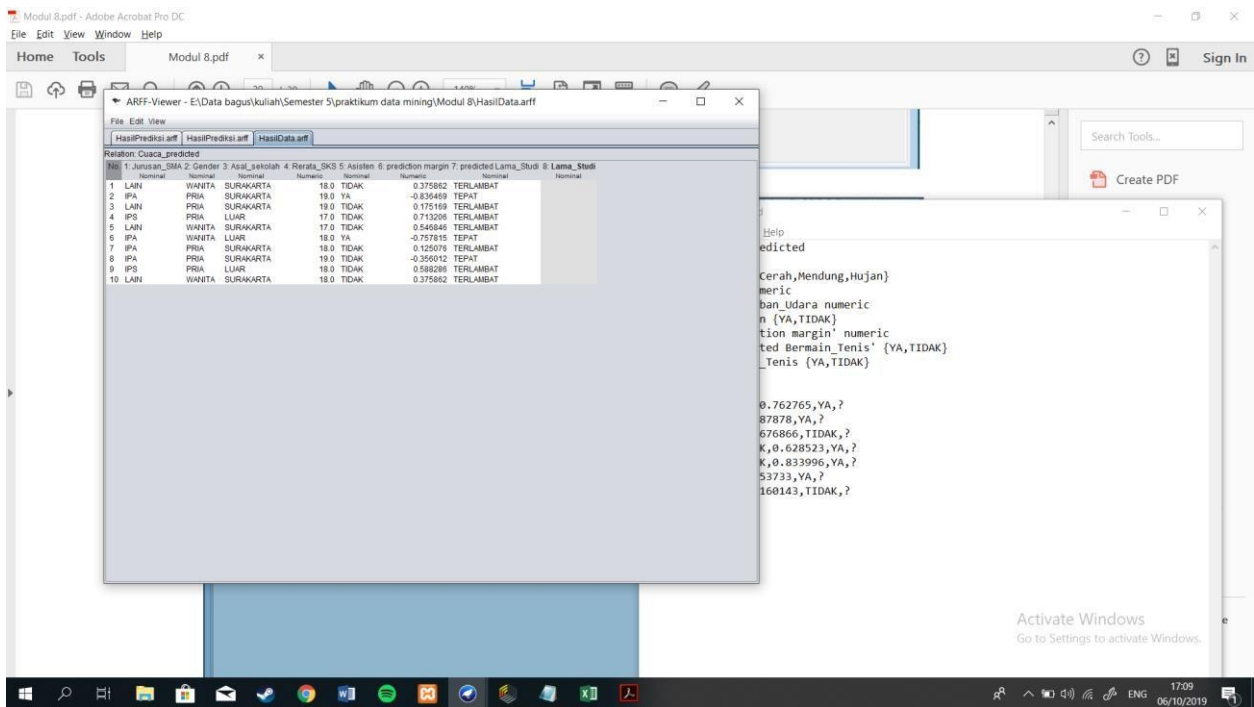
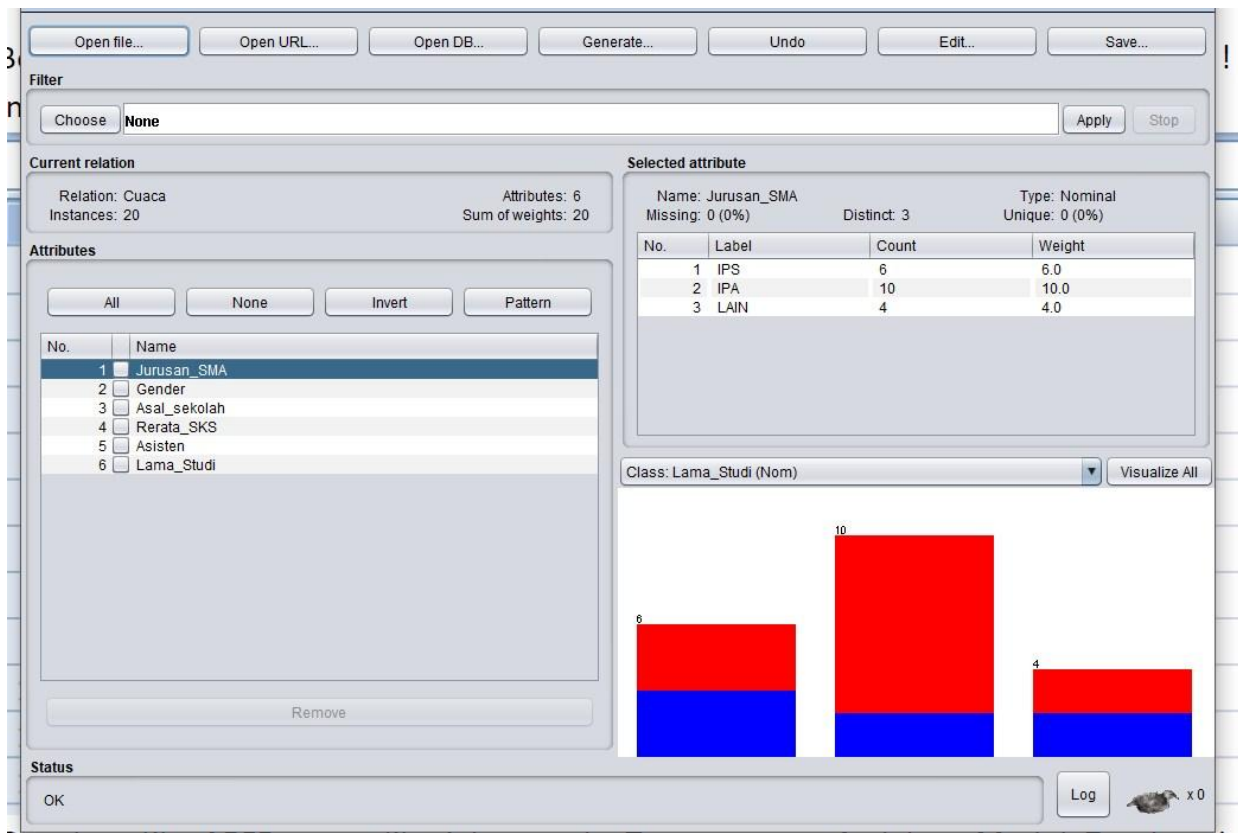
Activate Windows

Modul 8.pdf

16:58 06/10/2019

17.

<div> <div> <div> <div>Cut</div> <div>Paste</div> <div>Copy</div> <div>Format Painter</div> </div> </div> <div> <div>Calibri</div> <div>11</div> <div>A</div> <div>A</div> </div> <div> <div>B</div> <div>I</div> <div>U</div> <div></div> <div></div> <div></div> <div>A</div> </div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div>Wrap Text</div> <div>Merge & Center</div> </div> </div> <div>ClipboardFontAlignment</div>					
<div> <div>F16</div> <div> <div>X</div> <div>✓</div> <div>fx</div> </div> </div>					
	A	B	C	D	E
1	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_Sekolah	Asisten
2	LAIN	WANITA	SURAKARTA	18	TIDAK
3	IPA	PRIA	SURAKARTA	19	YA
4	LAIN	PRIA	SURAKARTA	19	TIDAK
5	IPS	PRIA	LUAR	17	TIDAK
6	LAIN	WANITA	SURAKARTA	17	TIDAK
7	IPA	WANITA	LUAR	18	YA
8	IPA	PRIA	SURAKARTA	18	TIDAK
9	IPA	PRIA	SURAKARTA	19	TIDAK
10	IPS	PRIA	LUAR	18	TIDAK
11	LAIN	WANITA	SURAKARTA	18	TIDAK
12					



3.Data Training

Format your columns.

☐ Replace errors with missing values ⓘ

	Jurusan_SMA <i>polynomial</i>	Gender <i>polynomial</i>	Asal_Sekolah <i>polynomial</i>	Rerata_Sekolah <i>integer</i>	Asisten <i>binominal label</i>
1	LAIN	WANITA	SURAKARTA	18	TIDAK
2	IPA	PRIA	SURAKARTA	19	YA
3	LAIN	PRIA	SURAKARTA	19	TIDAK
4	IPS	PRIA	LUAR	17	TIDAK
5	LAIN	WANITA	SURAKARTA	17	TIDAK
6	IPA	WANITA	LUAR	18	YA
7	IPA	PRIA	SURAKARTA	18	TIDAK
8	IPA	PRIA	SURAKARTA	19	TIDAK
9	IPS	PRIA	LUAR	18	TIDAK
10	LAIN	WANITA	SURAKARTA	18	TIDAK

no problems

Previous

Next

Cancel

<new process> - RapidMiner Studio Educational 9.4.001 @ DESKTOP-I28FKT3

File Edit Process View Connections Settings Extensions Help



Views:

Design

Results

Turbo Prep

Auto Model

Deployments

Find data, operators, etc.

All Studio

ExampleSet (/Local Repository/DataCuaca_Testing)

ExampleSet (/Local Repository/DataCuaca_Training)

Result History

ExampleSet (/Local Repository/DataSekolah_Training)

ExampleSet (Apply Model)

Data

Open in



Turbo Prep



Auto Model

Filter (10 / 10 examples): all

Statistics

Visualizations

Annotations

Row No.	Asisten	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_Sek...
1	TIDAK	LAIN	WANITA	SURAKARTA	18
2	YA	IPA	PRIA	SURAKARTA	19
3	TIDAK	LAIN	PRIA	SURAKARTA	19
4	TIDAK	IPS	PRIA	LUAR	17
5	TIDAK	LAIN	WANITA	SURAKARTA	17
6	YA	IPA	WANITA	LUAR	18
7	TIDAK	IPA	PRIA	SURAKARTA	18
8	TIDAK	IPA	PRIA	SURAKARTA	19
9	TIDAK	IPS	PRIA	LUAR	18
10	TIDAK	LAIN	WANITA	SURAKARTA	18

ExampleSet (10 examples, 1 special attribute, 4 regular attributes)

Repository

Import Data

- Samples
- DB (Legacy)
- Local Repository (PERSONAL)
 - Connections (PERSONAL)
 - data (PERSONAL)
 - processes (PERSONAL)
 - DataCuaca_Testing (PERSONAL - v1, 10)
 - DataCuaca_Training (PERSONAL - v1, 10)
 - DataSekolah_Training (PERSONAL - v1, 10)

Activate Windows

Go to Settings to activate Windows

b.Data Testing

Import Data - Format your columns. ✕

Format your columns.

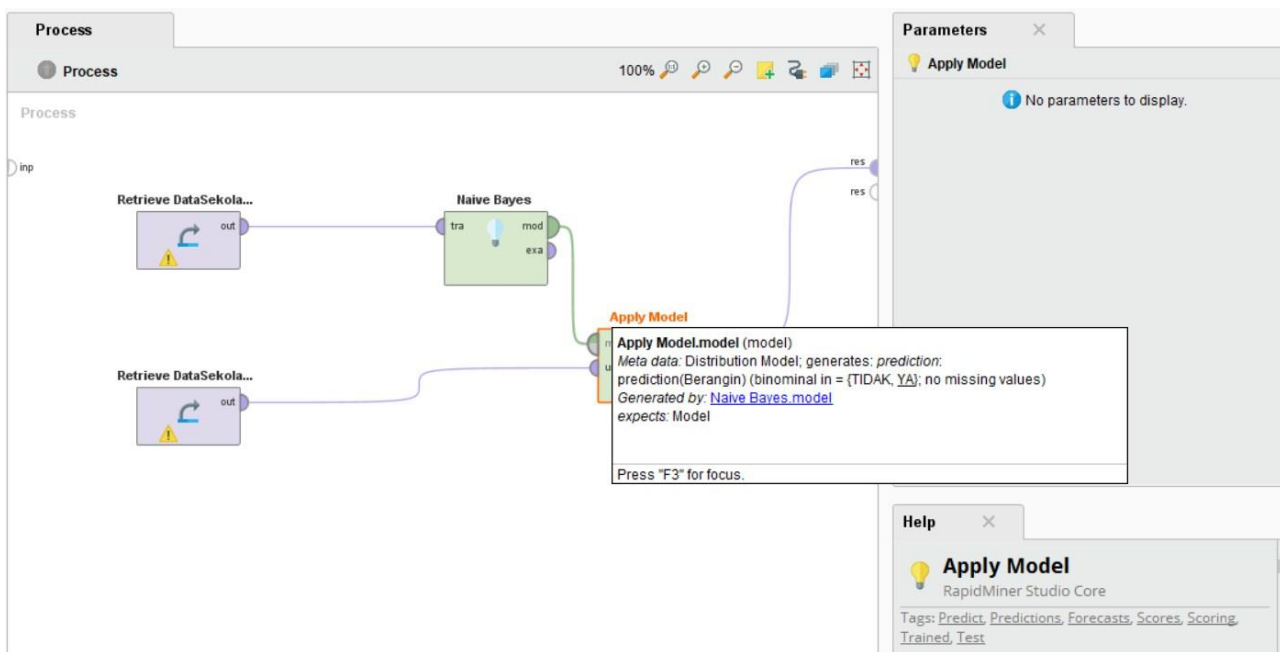
☐ Replace errors with missing values ⓘ

	Cuaca <i>polynominal</i>	Suhu <i>integer</i>	Kelembaban_udara <i>integer</i>	Berangin <i>binominal label</i>
1	Cerah	75	65	TIDAK
2	Cerah	80	68	YA
3	Cerah	83	87	YA
4	Mendung	70	96	TIDAK
5	Mendung	68	81	TIDAK
6	Hujan	65	75	YA
7	Hujan	64	85	YA

✓ no problemsGo

← Previous Next → ✕ Cancel

c.implementasi naïve bayes



d.hasil

Open in Turbo Prep Auto Model Filter (10 / 10 examples): all

Row No.	prediction(L...	confidence(...	confidence(...	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_SKS	Asisten
1	TERLAMBAT	0.648	0.352	LAIN	WANITA	SURAKARTA	18	TIDAK
2	TEPAT	0.005	0.995	IPA	PRIA	SURAKARTA	19	YA
3	TERLAMBAT	0.650	0.350	LAIN	PRIA	SURAKARTA	19	TIDAK
4	TERLAMBAT	0.658	0.132	IPS	PRIA	LUAR	17	TIDAK
5	TERLAMBAT	0.738	0.262	LAIN	WANITA	SURAKARTA	17	TIDAK
6	TEPAT	0.005	0.995	IPA	WANITA	LUAR	18	YA
7	TERLAMBAT	0.547	0.453	IPA	PRIA	SURAKARTA	18	TIDAK
8	TEPAT	0.321	0.679	IPA	PRIA	SURAKARTA	19	TIDAK
9	TERLAMBAT	0.811	0.189	IPS	PRIA	LUAR	18	TIDAK
10	TERLAMBAT	0.648	0.352	LAIN	WANITA	SURAKARTA	18	TIDAK

ExampleSet (10 examples, 3 special attributes, 5 regular attributes)

Name	Type	Missing	Statistics	Filter (8 / 8 attributes):
prediction(Lama_Studi)	Binominal	0	Least TEPAT (3)	Most TERLAMBAT (7)
confidence(TERLAMBAT)	Real	0	Min 0.005	Max 0.868
confidence(TEPAT)	Real	0	Min 0.132	Max 0.995
Jurusan_SMA	Polynomial	0	Least IPS (2)	Most IPA (4)
Gender	Polynomial	0	Least WANITA (4)	Most PRIA (6)
Asal_Sekolah	Polynomial	0	Least LUAR (3)	Most SURAKARTA (7)

4.

confidence(TERLAMBAT)	Real	0	Min 0.005	Max 0.868	Average 0.524
confidence(TEPAT)	Real	0	Min 0.132	Max 0.995	Average 0.476

5.

prediction(Lama_Studi)	Binominal	0	Least TEPAT (3)	Most TERLAMBAT (7)	Values TERLAMBAT (7), TEPAT (3)
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6.

a.

Import Data - Select the cells to import.

Select the cells to import.

Sheet: Sheet3 Cell range: A:E Select All Define header row: 1

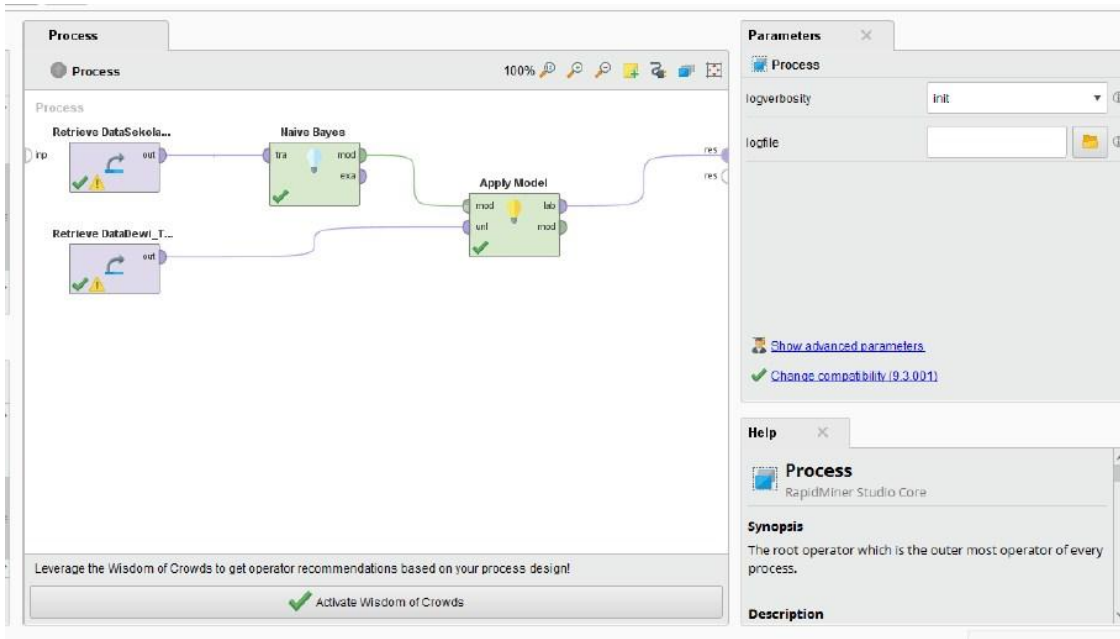
	A	B	C	D	E
1	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_SKS	Asisten
2	IPA	WANITA	LUAR SURAKARTA	18.000	TIDAK

Previous

Next

Cancel

b. naive bayes



c. hasil

Name	Type	Missing	Statistics	Filter (8 / 9 attributes)
✓ prediction(Lama_Studi)	Binominal	0	Least: TERLAMBAT (0) Most: TEPAT (1) Values: TEPAT (1), TERLAMBAT (0)	
✓ confidence_TERLAMBAT	Real	0	Min: 0.457 Max: 0.457 Average: 0.457	
✓ confidence_TEPAT	Real	0	Min: 0.543 Max: 0.543 Average: 0.543	
✓ Jurusan_SMA	Polynomial	0	Least: IPA (1) Most: IPA (1) Values: IPA (1)	
✓ Gender	Polynomial	0	Least: WANITA (1) Most: WANITA (1) Values: WANITA (1)	
✓ Asal_Sekolah	Polynomial	0	Least: LUAR SURAKARTA (1) Most: LUAR SURAKARTA (1) Values: LUAR SURAKARTA (1)	
✓ Rerata_SKS	Integer	0	Min: 18 Max: 18 Average: 18	
✓ Asisten	Polynomial	0	Least: TIDAK (1) Most: TIDAK (1) Values: TIDAK (1)	

Berdasarkan hasil di atas maka prediksi untuk Dewi dia akan lulus dengan tepat

7.

Import Data - Select the cells to import.

Select the cells to import.

Sheet: Sheet4 Cell range: A:E Select All ☒ Define header row: 1

	A	B	C	D	E
1	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_SKS	Asisten
2	LAIN	PRIA	SURAKARTA	17.000	YA

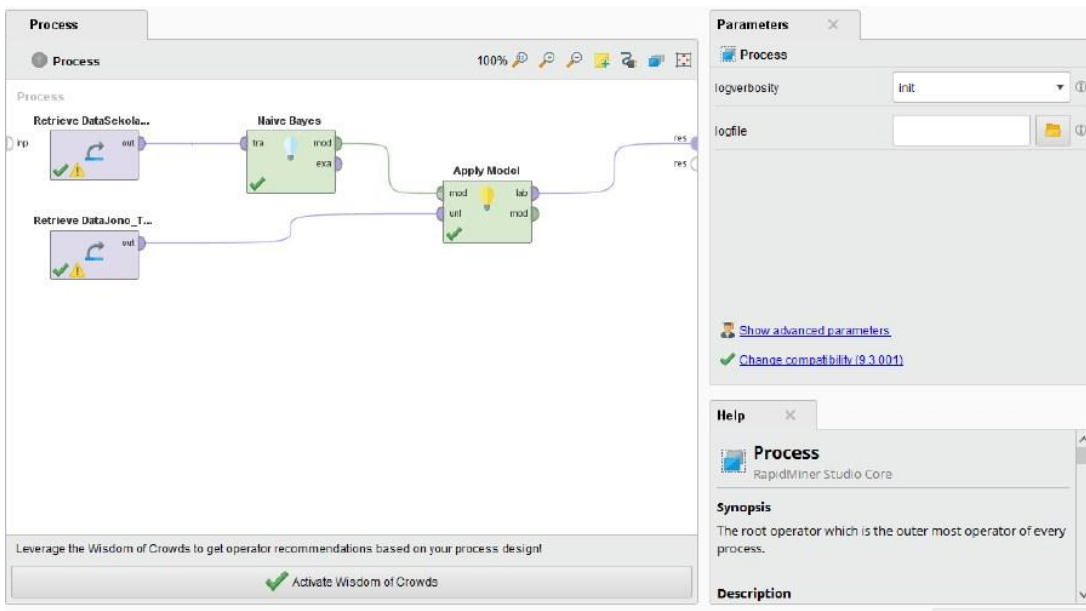
← Previous Next → ✖ Cancel

Open in: Turbo Prep Auto Model Filter (1 / 1 examples): all

Row No.	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_SKS	Asisten
1	LAIN	PRIA	SURAKARTA	17	YA

ExampleSet (1 example, 0 special attributes, 5 regular attributes)

b.Naive bayes



c.hasil

Open in Turbo Prep Auto Model Filter (1 / 1 examples):

Row No.	prediction(L...	confidence(...	confidence(...	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_SKS	Asisten
1	TEPAT	0.076	0.924	LAIN	PRIA	SURAKARTA	17	YA

Name	Type	Missing	Statistics	Filter (8 / 8 attributes):
✓ prediction(Lama_Studi)	Binominal	0	Least: TERLAMBAT (0), Most: TEPAT (1), Values: TEPAT (1), TERLAMBAT (0)	
✓ confidence(TERLAMBAT)	Real	0	Min: 0.076, Max: 0.076, Average: 0.076	
✓ confidence(TEPAT)	Real	0	Min: 0.924, Max: 0.924, Average: 0.924	
✓ Jurusan_SMA	Polynomial	0	Least: LAIN (1), Most: LAIN (1), Values: LAIN (1)	
✓ Gender	Polynomial	0	Least: PRIA (1), Most: PRIA (1), Values: PRIA (1)	
✓ Asal_Sekolah	Polynomial	0	Least: SURAKARTA (1), Most: SURAKARTA (1), Values: SURAKARTA (1)	
✓ Rerata_SKS	Integer	0	Min: 17, Max: 17, Average: 17	
✓ Asisten	Polynomial	0	Least: YA (1), Most: YA (1), Values: YA (1)	

Berdasarkan hasil di atas maka prediksi untuk Jono dia akan lulus dengan tepat