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Kelas : D

### LATIHAN

Import Data - Format your columns.

Format your columns.

Date format

MMM d, yyyy h:mm:ss a z

☐ Replace errors with missing values ⓘ

	Cuaca <i>polynominal</i>	Suhu <i>integer</i>	Kelembaban_... <i>integer</i>	Berangin <i>polynominal</i>	Bermain_Tenis <i>binominal label</i>
1	Cerah	85	85	TIDAK	TIDAK
2	Cerah	80	90	YA	TIDAK
3	Mendung	83	86	TIDAK	YA
4	Hujan	70	96	TIDAK	TIDAK
5	Hujan	68	80	TIDAK	YA
6	Hujan	65	70	YA	TIDAK
7	Mendung	64	65	YA	YA
8	Cerah	72	95	TIDAK	TIDAK
9	Cerah	69	70	TIDAK	YA
10	Hujan	75	80	TIDAK	YA
11	Cerah	75	70	YA	YA
12	Mendung	72	90	YA	YA
13	Mendung	81	75	TIDAK	YA

no problems.

Previous

Next

Cancel

<new process> - 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

**Repository**

- + Import Data
- Tabel Testing (Person - v)
- Tabel Training dan Test
- Tabel\_Cuaca (Person - v)
- Tabel\_Cuaca1 (Person - v)
- Tabel\_Cuaca2 (Person - v)
- Tabel\_Cuaca11 (Person - v)
- Tabel\_CuacaTesting (P)
- Tabel\_CuacaTraining (P)

**Operators**

perfor

- Performance (17)
- Predictive (7)
- Performance (Cis)
- Performance (Bin)
- Performance (Re)

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

**Process**

Process > Cross Validation

100%

Training: Decision Tree

Testing: Apply Model, Performance

**Parameters**

**Cross Validation**

- ☐ split on batch attribute
- ☐ leave one out
- number of folds: 10
- sampling type: automatic
- ☐ use local random seed
- ☒ enable parallel execution

[Hide advanced parameters](#)

[Change compatibility \(9.0.003\)](#)

**Help**

**Cross Validation**

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**Operators**

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

**Process**

Process >

100%

Process: Retrieve Tabel\_Cuac..., Cross Validation

**Parameters**

**Process**

- logverbosity: init
- logfile:
- resultfile:
- random seed: 2001
- send mail: never
- encoding: SYSTEM

[Hide advanced parameters](#)

[Change compatibility \(9.0.003\)](#)

**Help**

**Process**

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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

ExampleSet (/Local Repository/Tabel\_Cuaca2) ExampleSet (/Local Repository/Tabel\_Cuaca1)

Result History

Criterion accuracy

Performance

Description

Annotations

PerformanceVector (Performance)

Table View Plot View

accuracy: 60.00% +/- 43.59% (micro average: 64.29%)

	true TIDAK	true YA	class precision
pred. TIDAK	2	2	50.00%
pred. YA	3	7	70.00%
class recall	40.00%	77.78%	

class recall

Repository

Import Data

- Training Resources (connected)
- Samples
- Community Samples (connected)
- DB
- Local Repository (LABSI-01)
  - Connections (LABSI-01)
  - data (LABSI-01)
  - processes (LABSI-01)
    - Book1 (Person - v1, 11/14/19 3:20 PM -
    - Cuaca (Person - v1, 11/7/19 10:58 AM -
    - CuacaTesting (Person - v1, 11/7/19 11: -
    - data1 (Person - v1, 10/16/19 11:50 AM -
    - Data\_LamaBelajardanNilaiUjian (Pe
    - Data\_NilaiUjian (Person - v1, 11/14/19
    - Data\_PrediksiNilaiUjian (Person - v1,
    - DataCuaca\_Testing (LABSI-01 - v1, 11
    - DataCuaca\_Training (LABSI-01 - v1, 1
    - Datasekolah\_Training (LABSI-01 - v1,
    - dataTesting1.arff (Person - v1, 10/17/19
    - dataTesting2222.arff (Person - v1, 10/1
    - dataTraining1.arff (Person - v1, 10/17/1

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Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

ExampleSet (/Local Repository/Tabel\_Cuaca2) ExampleSet (/Local Repository/Tabel\_Cuaca1)

Result History

PerformanceVector (Performance)

Tree (Decision Tree)

Zoom

Tree

Node Labels

Edge Labels

Graph

Description

Annotations

Decision Tree Structure:

```
graph TD
    Cuaca -->|Cerah| Kelembaban_udara
    Cuaca -->|Hujan| Berangin
    Cuaca -->|Mendung| YA
    Kelembaban_udara -->|> 77.50%| TIDAK
    Kelembaban_udara -->|<= 77.50%| YA
    Berangin -->|TIDAK| YA
    Berangin -->|YA| TIDAK
```

Repository

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- Tabel\_CuacaTesting (Person - v1)
- Tabel\_CuacaTraining (Person - v1)

**Operators**

perform

- Performance (17)
- Predictive (7)
- Performance (Classification)
- Performance (Binary)
- Performance (Regression)

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

**Process**

Process > Cross Validation

100%

Training: tra (Person) -> Rule Induction (Person) -> mod (Person) -> tes (Person)

Testing: mod (Person) -> Apply Model (Person) -> lab (Person) -> per (Person) -> tes (Person)

**Parameters**

Rule Induction

- criterion: information\_gain
- sample ratio: 0.9
- purity: 0.9
- minimal prune benefit: 0.25
- use local random seed: ☐

[Hide advanced parameters](#)

**Help**

Rule Induction

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

Activate Wisdom of Crowds

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Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

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  - dataTraining1.arff (Person - v1, 10/17/19)

**Results**

ExampleSet (//Local Repository/Tabel\_Cuaca2)

PerformanceVector (Performance)

RuleModel (Rule Induction)

**RuleModel**

Description

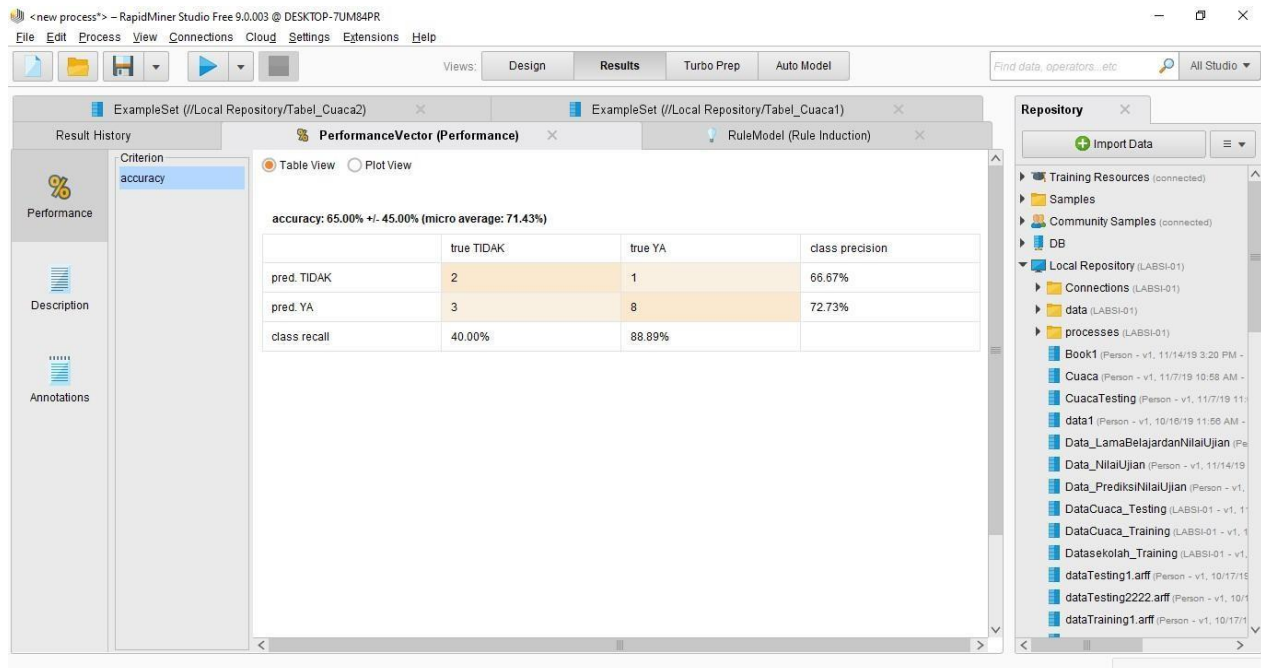
```

if Kelembaban_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)

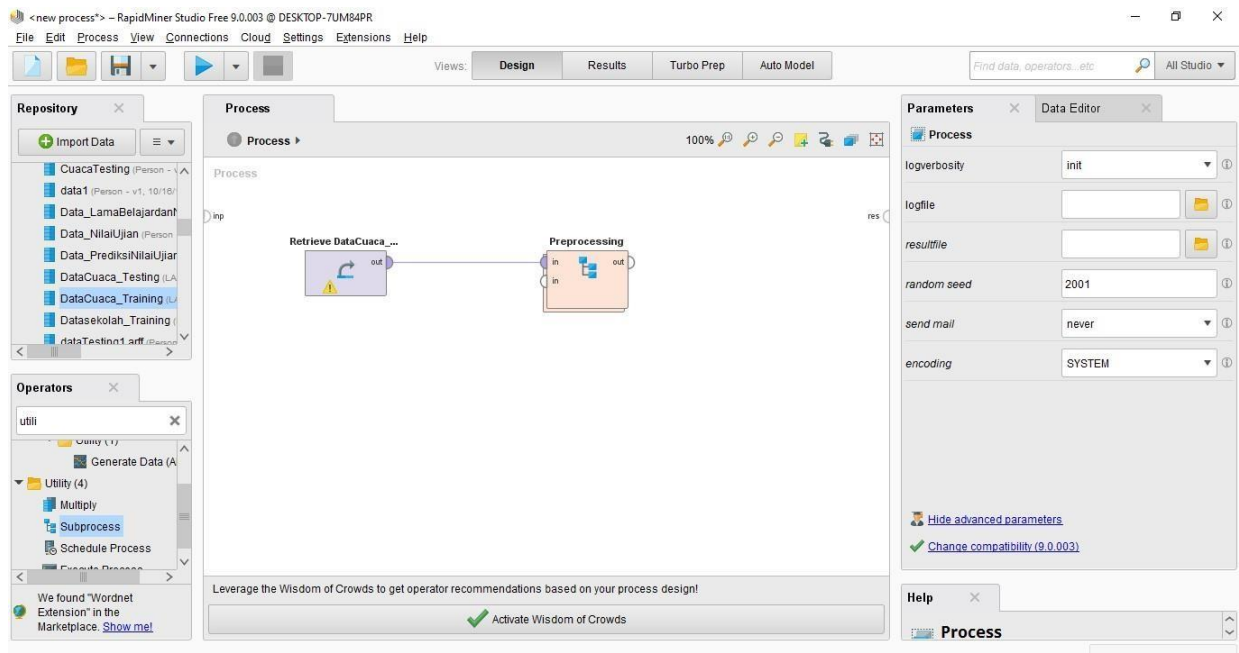
```

Annotations

correct: 12 out of 13 training examples.



11.4.2.



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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
- CuacaTesting (Person - v1, 10/10/18)
- data1 (Person - v1, 10/10/18)
- Data\_LamaBelajardant
- Data\_NilaiUjian (Person)
- Data\_PrediksiNilaiUjian
- DataCuaca\_Testing (LA)
- DataCuaca\_Training (LA)
- Datasekolah\_Training
- dataTestinn1.arff (Person)

**Operators**

Search for Operators

- Nominal to Real
- Numerical to Real
- Numerical to Date
- Real to Integer
- Nominal to Binom
- Nominal to Text
- Nominal to Num

Get more operators from the Marketplace

**Process**

Process > Preprocessing

Preprocessing

Discretize

Nominal to Binominal

Parameters

Preprocessing (Subprocess)

No parameters to display.

Help

Subprocess

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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
- CuacaTesting (Person - v1, 10/10/18)
- data1 (Person - v1, 10/10/18)
- Data\_LamaBelajardant
- Data\_NilaiUjian (Person)
- Data\_PrediksiNilaiUjian
- DataCuaca\_Testing (LA)
- DataCuaca\_Training (LA)
- Datasekolah\_Training
- dataTestinn1.arff (Person)

**Operators**

Search for Operators

- Associations (6)
- FP-Growth
- Create Association F
- Apply Association Ru
- Generalized Sequen
- Item Sets to Data
- Utility Item Sets

Get more operators from the Marketplace

**Process**

Process > Process

Process

Retrieve DataCuaca...

Preprocessing

FP-Growth

Parameters

Process

- logverbosity: init
- logfile:
- resultfile:
- random seed: 2001
- send mail: never
- encoding: SYSTEM

Hide advanced parameters

Change compatibility (9.0.003)

Help

Process



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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
- CuacaTesting (Person - v1, 11/7/19 11:11)
- data1 (Person - v1, 10/16/19 3:13)
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- dataTesting2222.arff (Person - v1, 10/17/19 10:05)
- dataTraining1.arff (Person - v1, 10/17/19 10:05)
- dataTraining2222.arff (Person - v1, 10/17/19 10:05)
- hasil\_cuaca (Person - v1, 11/7/19 3:13)
- Lokasi\_Testing (Person - v1, 10/16/19 1:16 PM - 2 KB)
- Lokasi\_Training (Person - v1, 10/16/19 1:16 PM - 5 MB)
- M1 (Person - v1, 11/20/19 1:16 PM - 2 KB)
- M11-induksi (Person - v1, 11/21/19 10:05)
- M@ (Person - v1, 11/20/19 1:20 PM - 5 MB)
- MODUL10 (Person - v1, 11/16/19 1:33 PM)
- modul11.1 (LABSI-01 - v1, 11/20/19 1:16 PM - 5 MB)
- modul11.2 (LABSI-01 - v1, 11/20/19 1:16 PM - 5 MB)
- perencanaan11 (Person - v1, 11/20/19 1:16 PM - 5 MB)

**Operators**

Search for Operators

- Predictive (61)
- Segmentation (14)
- Associations (6)
- FP-Growth
- Create Association Rules
- Apply Association Rules
- Generalized Sequential Pattern Mining

Get more operators from the Marketplace

**Process**

Process

Retrieve DataCuaca\_Testing (LABSI-01 - v1, 11/20/19 1:16 PM - 2 KB) → Preprocessing → FP-Growth → Create Association Rules (LABSI-01 - v1, 11/20/19 1:16 PM - 5 MB)

Parameters

Process

- logverbosity: init
- logfile:
- resultfile:
- random seed: 2001
- send mail: never
- encoding: SYSTEM

Hide advanced parameters

Change compatibility (9.0.003)

Help

Process

<new process> - 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

**AssociationRules (Create Association Rules)**

Result History

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

Min. Size: 1  
Max. Size: 4  
Contains item:

Update View

**FrequentItemSets (FP-Growth)**

Size	Support	Item 1	Item 2	Item 3	Item 4
1	0.500	Kelembaban_udara			
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	Kelembaban_udara	Berangin		
2	0.214	Kelembaban_udara	Suhu		
2	0.214	Kelembaban_udara	Cuaca = Cerah		
2	0.143	Kelembaban_udara	Cuaca = Hujan		
2	0.143	Kelembaban_udara	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		

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- perencanaan11 (Person - v1, 11/20/19 1:16 PM - 5 MB)

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Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History

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

Show rules matching

all of these conclusions:

Suhu

Cuaca = Cerah

Min. Criterion: confidence

Min. Criterion Value:

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

Repository

Import Data

- CuacaTesting (Person - v1, 11/7/19 11:11)
- data1 (Person - v1, 10/16/19 11:56 AM)
- Data\_LamaBelajardanNilaiUjian (Pe
- Data\_NilaiUjian (Person - v1, 11/14/19
- Data\_PrediksiNilaiUjian (Person - v1,
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- DataCuaca\_Training (LABSI-01 - v1, 11/
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- dataTesting2222.arff (Person - v1, 10/16/
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- dataTraining2222.arff (Person - v1, 10/16/
- hasil\_cuaca (Person - v1, 11/7/19 3:13 PM)
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- modul11.1 (LABSI-01 - v1, 11/20/19 1:11 PM)
- modul11.2 (LABSI-01 - v1, 11/20/19 1:12 PM)
- nerophaan11 (Person - v1, 11/13/19 1:11 PM)

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Find data, operators, etc. All Studio

Result History

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

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 / 1.000)

Kelembaban\_udara

Suhu

Cuaca = Cerah

Berangin

Repository

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- nerophaan11 (Person - v1, 11/13/19 1:11 PM)





Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

