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Kelas : C

Modul 10

Percobaan

Table data nilai siswa

NO_SISWA	NAMA	B.IND	B.ING
S-101	JOKO	8.54	8.4
S-102	AGUS	9.98	6.81
S-103	SUSI	6.2	9.15
S-104	DYAH	5.24	7.26
S-105	WATI	5.7	5.71
S-106	IKA	8.57	5.87
S-107	EKO	7.7	7.71
S-108	YANTO	6.6	5.7
S-109	WAWAN	9	8.12
S-110	MAHMUD	9.81	9.58

Proses clustering menggunakan RapidMiner

Import Data - Select the cells to import.

Select the cells to import.

Sheet: Sheet1

Cell range: B1:D11

Select All

☒ Define header row: 1

	A	B	C	D
1	NO_SISWA	NAMA	B.IND	B.ING
2	S-101	JOKO	8.540	8.400
3	S-102	AGUS	9.980	6.810
4	S-103	SUSI	6.200	9.150
5	S-104	DYAH	5.240	7.260
6	S-105	WATI	5.700	5.710
7	S-106	IKA	8.570	5.870
8	S-107	EKO	7.700	7.710
9	S-108	YANTO	6.600	5.700
10	S-109	WAWAN	9.000	8.120
11	S-110	MAHMUD	9.810	9.580

Previous

Next

Cancel

Import Data - Format your columns.

Format your columns.

☐ Replace errors with missing values ⓘ

	NAMA <i>polynomial id</i>	B.IND <i>real</i>	B.ING <i>real</i>
1	JOKO	8.540	8.400
2	AGUS	9.980	6.810
3	SUSI	6.200	9.150
4	DYAH	5.240	7.260
5	WATI	5.700	5.710
6	IKA	8.570	5.870
7	EKO	7.700	7.710
8	YANTO	6.600	5.700
9	WAWAN	9.000	8.120
10	MAHMUD	9.810	9.580

✓ no problems.

← Previous → Next ✗ Cancel

Import Data - Where to store the data?

Where to store the data?

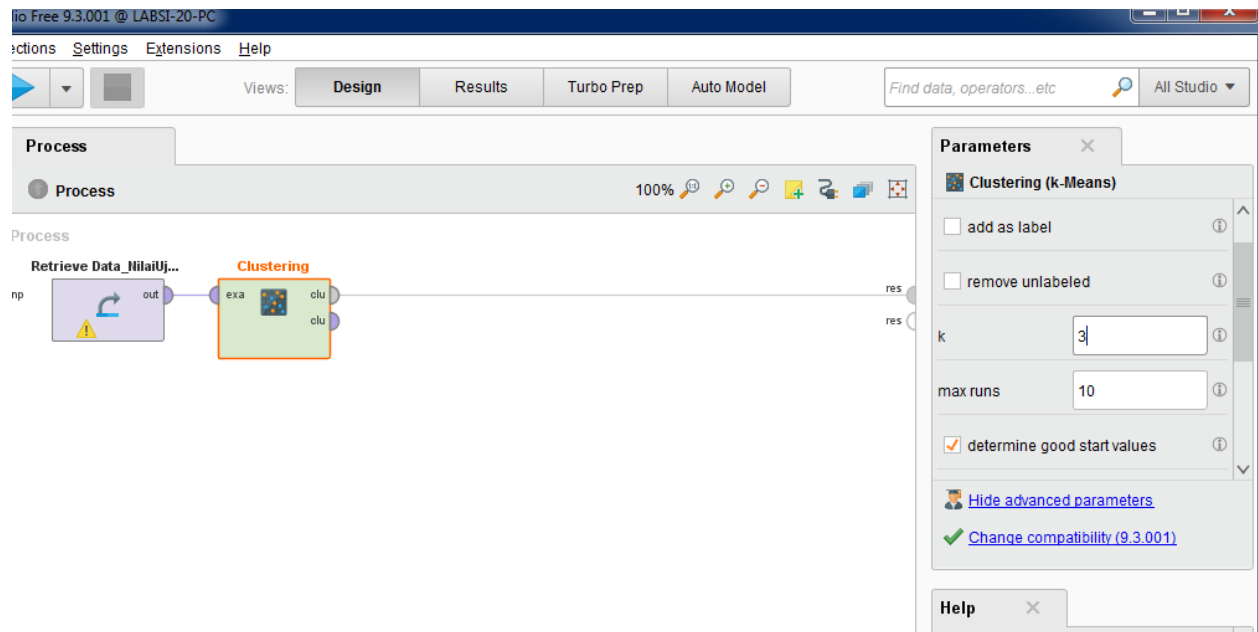
- Local Repository (LABSI-20)
 - Connections (LABSI-20)
 - data (LABSI-20)
 - processes (LABSI-20)

Name

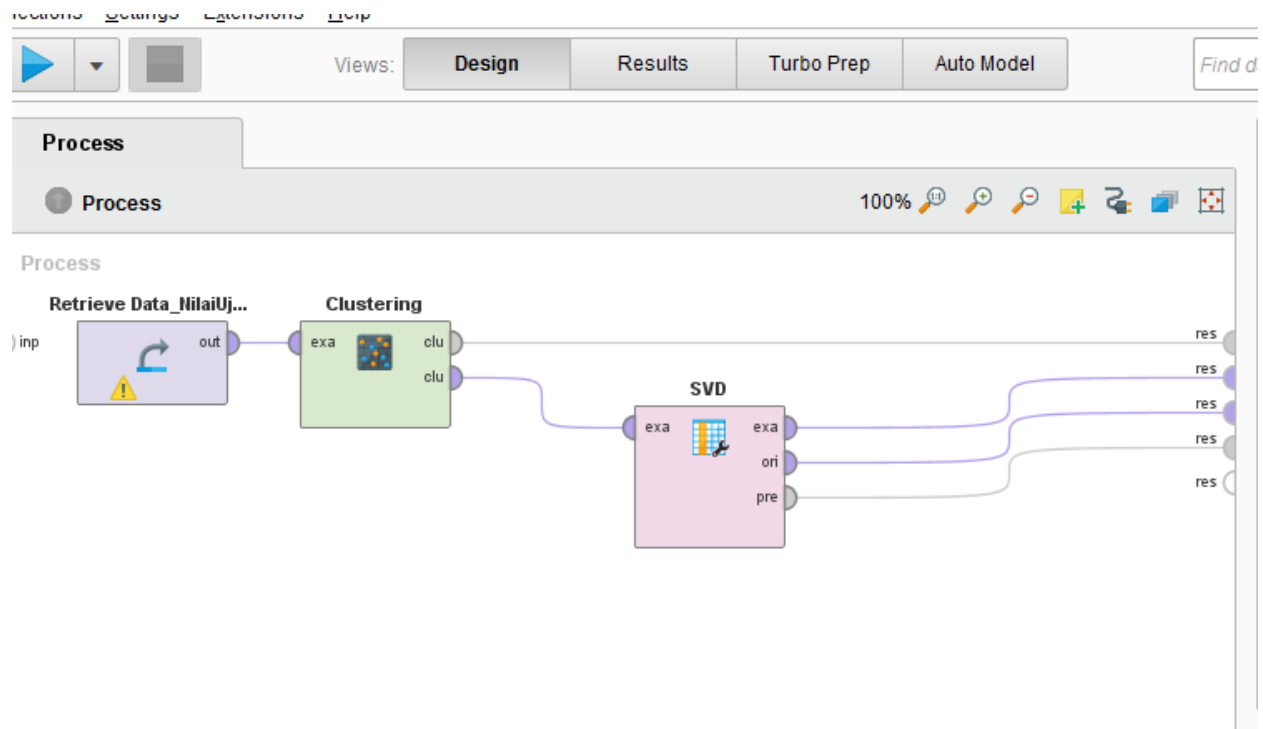
Location //Local Repository/Data_NilaiUjian

← Previous Finish ✗ Cancel

Cluster k-Means ada 3



Menambahkan SVD lalu di Run



Hasil proses Clustering dengan algoritma K-Means

a) SVD

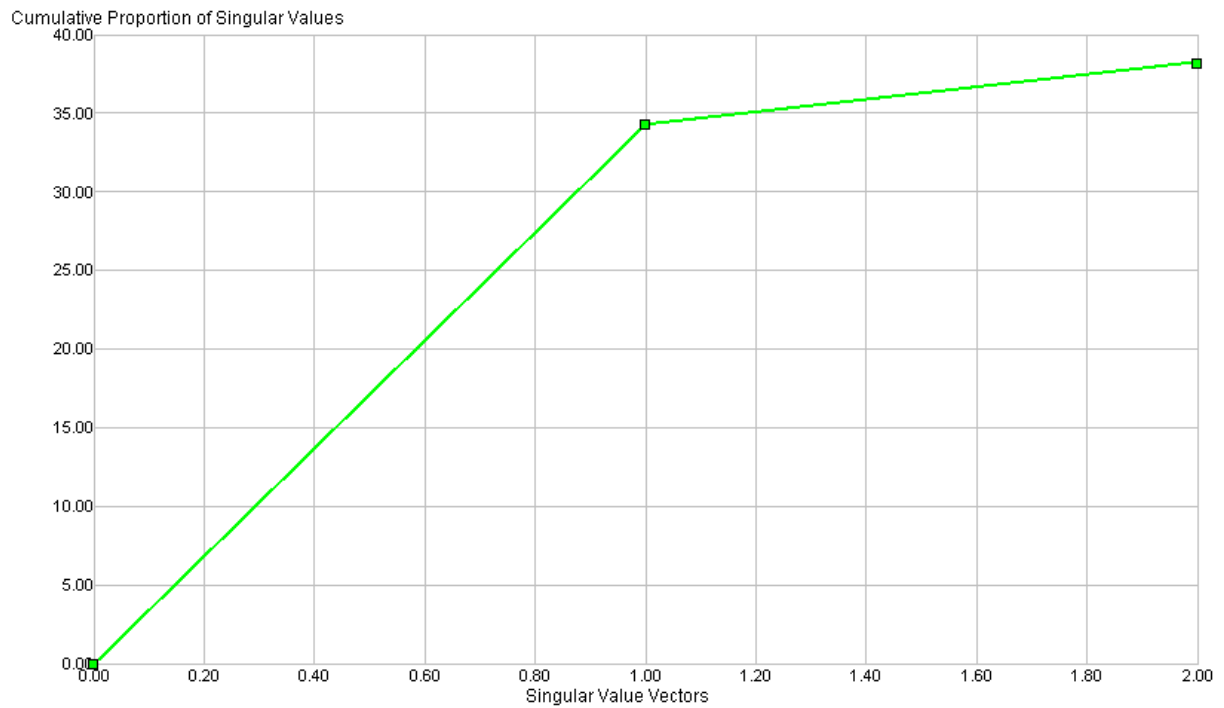
i. Nilai Eigenvalue

Component	Singular Value	Proportion of Singular V...	Cumulative Singular Val...	Cumulative Proportion o...
SVD 1	34.340	0.898	34.340	0.898
SVD 2	3.906	0.102	38.246	1.000

ii. Nilai SVD vectors

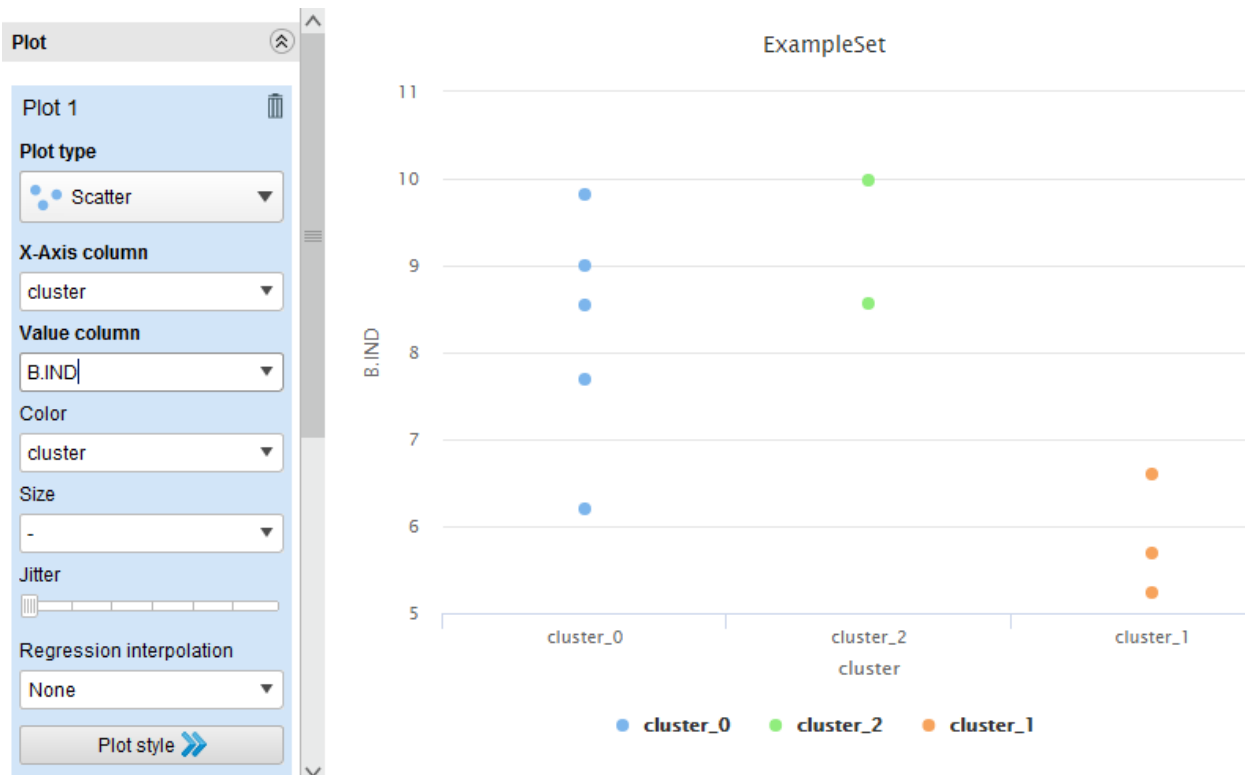
Attribute	SVD Vector 1
B.IND	0.723
B.ING	0.690

iii. Nilai Cumulative variance

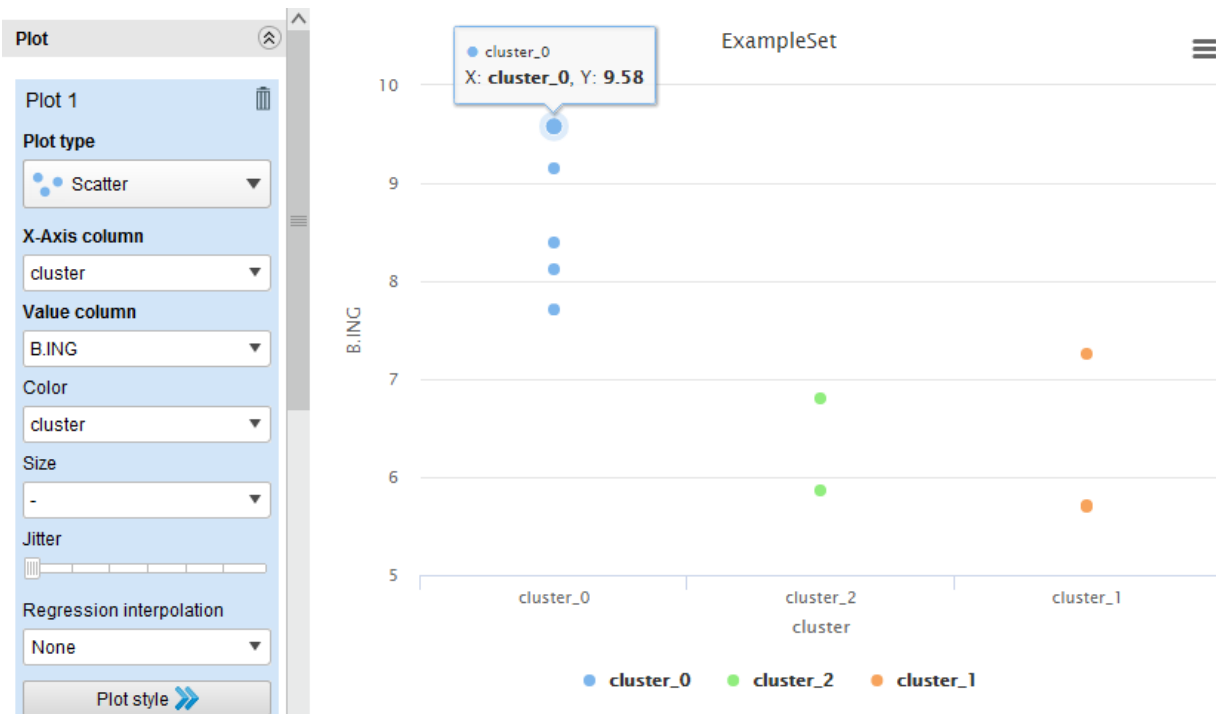


b) ExampleSet (k-Means)

i. Kelompok siswa bidang B.Indonesia



ii. Kelompok siswa bidang B.Ingggris



c) ExampleSet (SVD)

Row No.	NAMA	cluster ↑	svd_1
1	JOKO	cluster_0	0.349
3	SUSI	cluster_0	0.315
7	EKO	cluster_0	0.317
9	WAWAN	cluster_0	0.353
10	MAHMUD	cluster_0	0.399
4	DYAH	cluster_1	0.256
5	WATI	cluster_1	0.235
8	YANTO	cluster_1	0.254
2	AGUS	cluster_2	0.347
6	IKA	cluster_2	0.299

d) Cluster Model (Clustering)

i. Description

Cluster Model

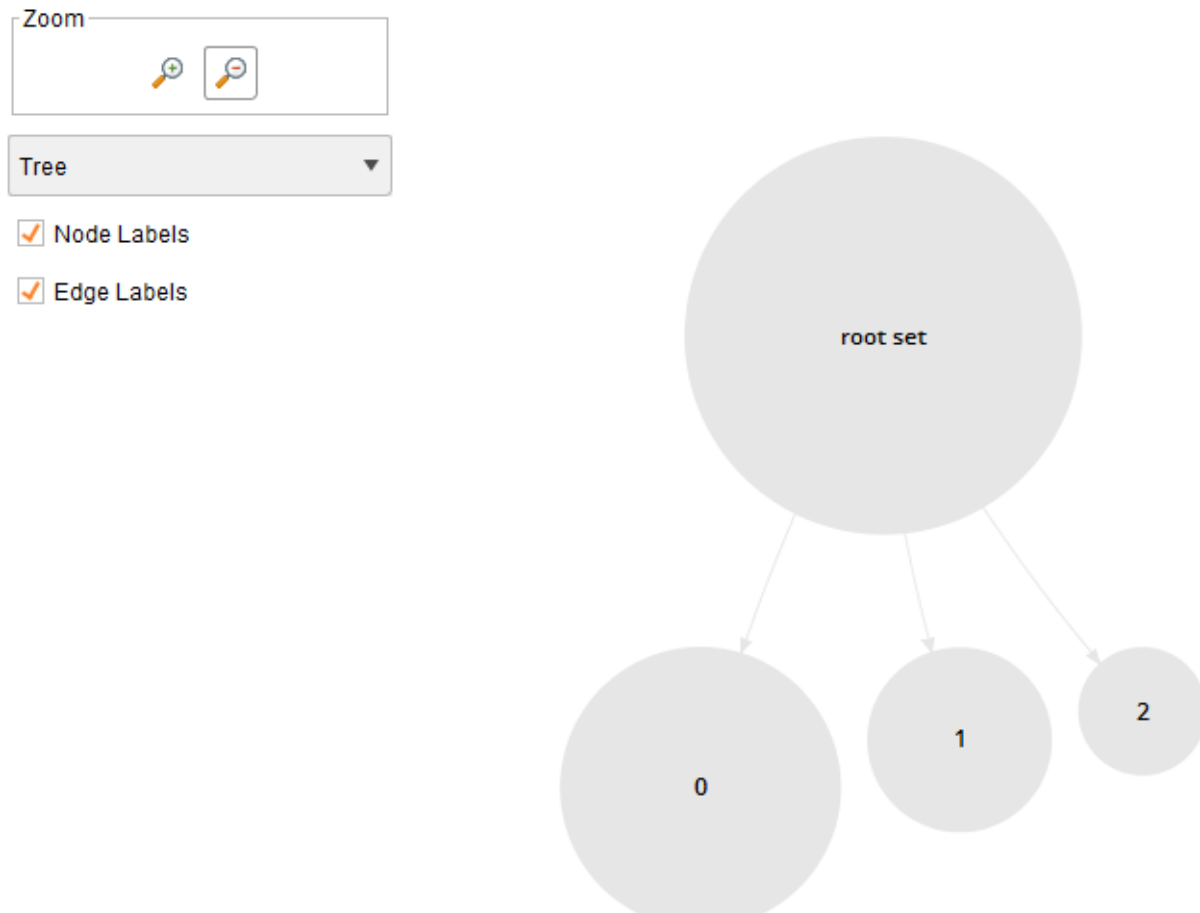
Cluster 0: 5 items

Cluster 1: 3 items

Cluster 2: 2 items

Total number of items: 10

ii. Graph



Interpretasi hasil algoritma K-Means

Row No.	NAMA	cluster ↑	B.IND	B.ING
1	JOKO	cluster_0	8.540	8.400
3	SUSI	cluster_0	6.200	9.150
7	EKO	cluster_0	7.700	7.710
9	WAWAN	cluster_0	9	8.120
10	MAHMUD	cluster_0	9.810	9.580
4	DYAH	cluster_1	5.240	7.260
5	WATI	cluster_1	5.700	5.710
8	YANTO	cluster_1	6.600	5.700
2	AGUS	cluster_2	9.980	6.810
6	IKA	cluster_2	8.570	5.870