

NAMA : DEWI RAHMAWATI

NIM : L200170188

KELAS : F

Modul 10

## Praktikum Data Warehousing Data Mining

1. Mengubah kolom NAMA menjadi id

Import Data - Format your columns.

**Format your columns.**

☐ Replace errors with missing values ⓘ

	NAMA <i>polynominal 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

2. Save file dengan nama Data\_NilaiUjian

Import Data - Where to store the data?

**Where to store the data?**

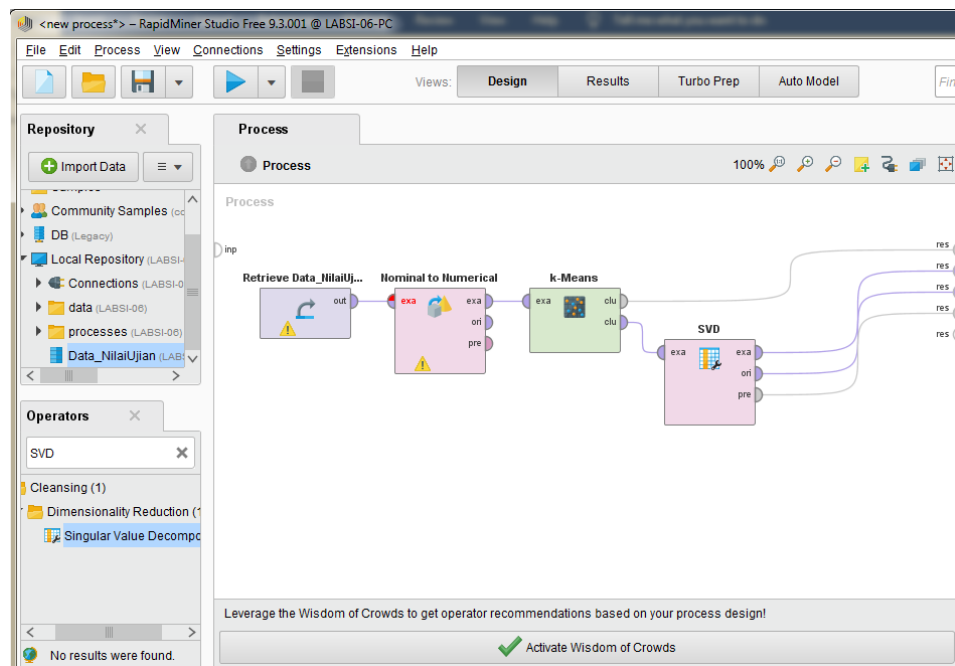
- Local Repository (LABSI-06)
  - Connections (LABSI-06)
  - data (LABSI-06)
  - processes (LABSI-06)

Name Data\_NilaiUjian

Location //Local Repository/Data\_NilaiUjian

Previous Finish Cancel

3. Memasukkan Data\_NilaiUjian ke dalam area process. Dengan menambahkan operator k-Means dan operator SVD

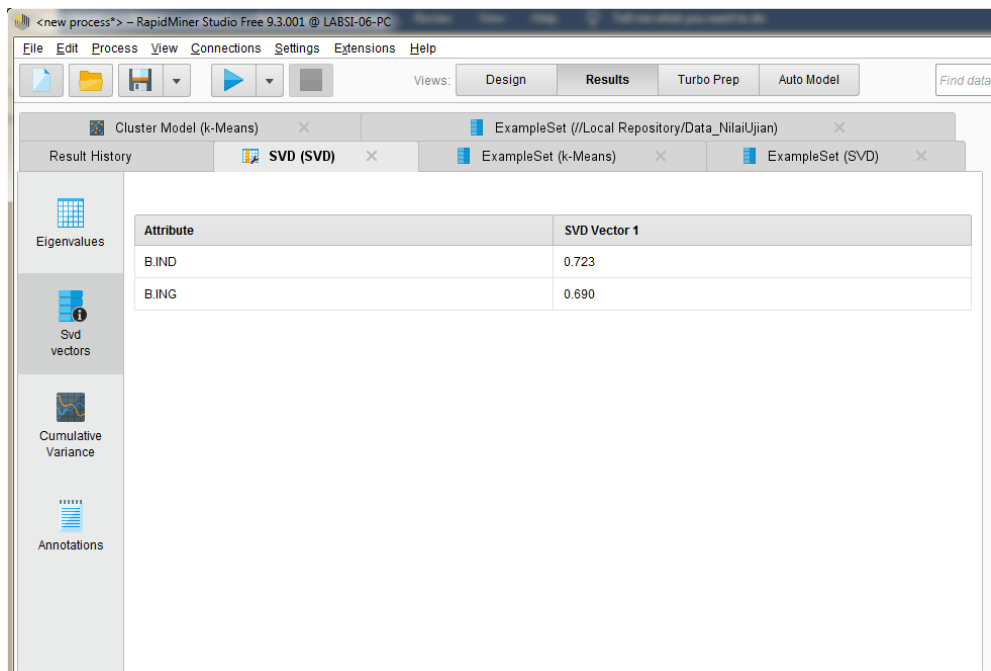


4. Hasil proses Clustering pada
  - a. SVD (Singular Value Decomposition)
    - i. Nilai Eigenvalue

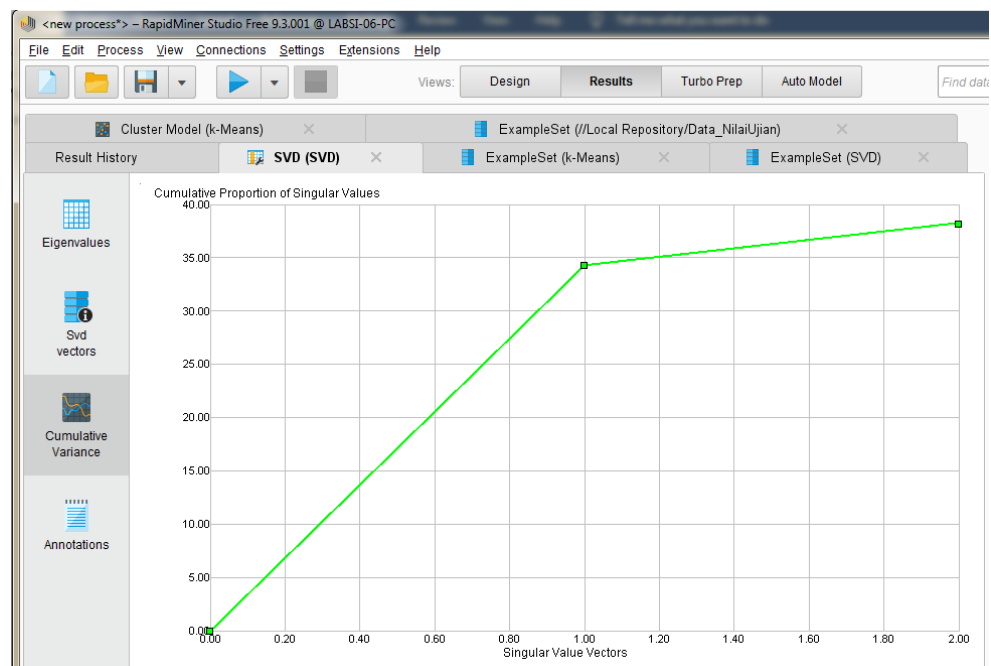
The screenshot shows the 'Results' view of RapidMiner Studio. The 'SVD (SVD)' operator is selected, displaying a table of eigenvalues. The table has columns: Component, Singular Value, Proportion of Singular V..., Cumulative Singular Val..., and Cumulative Proportion o....

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

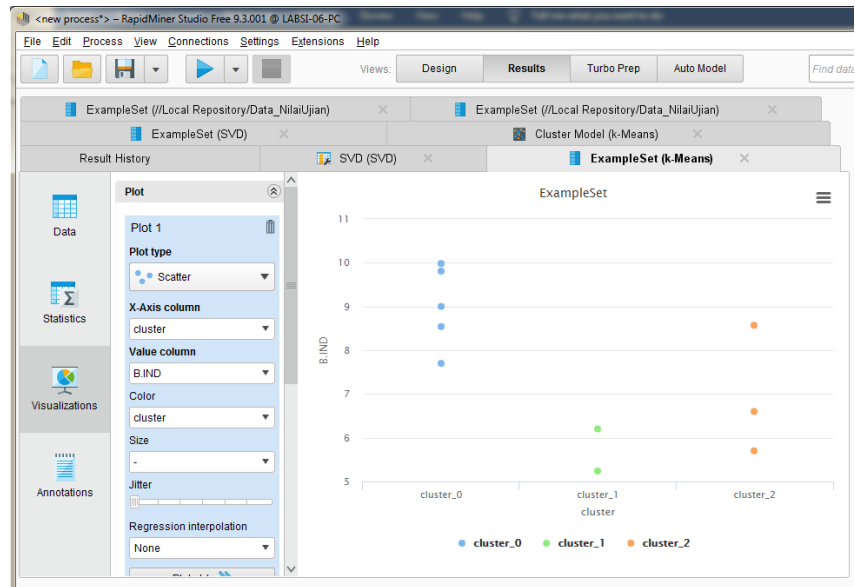
## ii. Nilai svd vectors



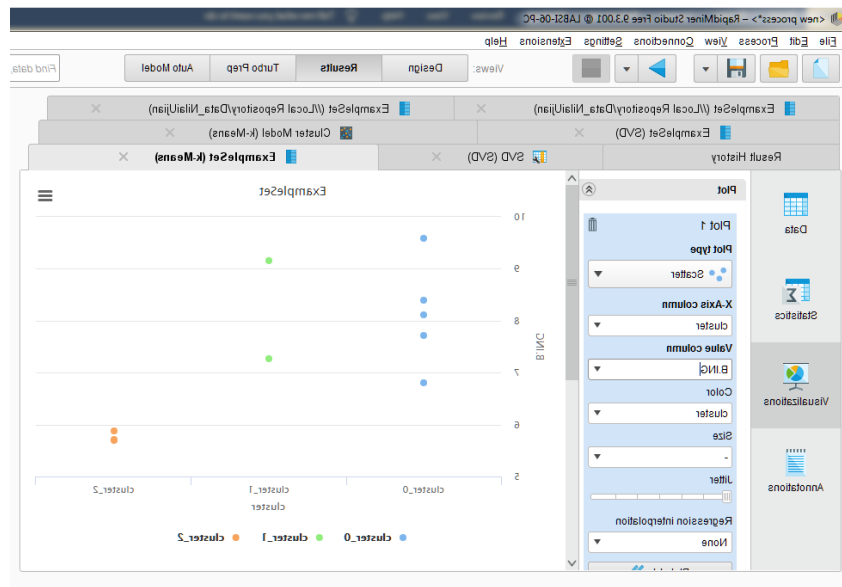
## iii. Niali Cumulative variance



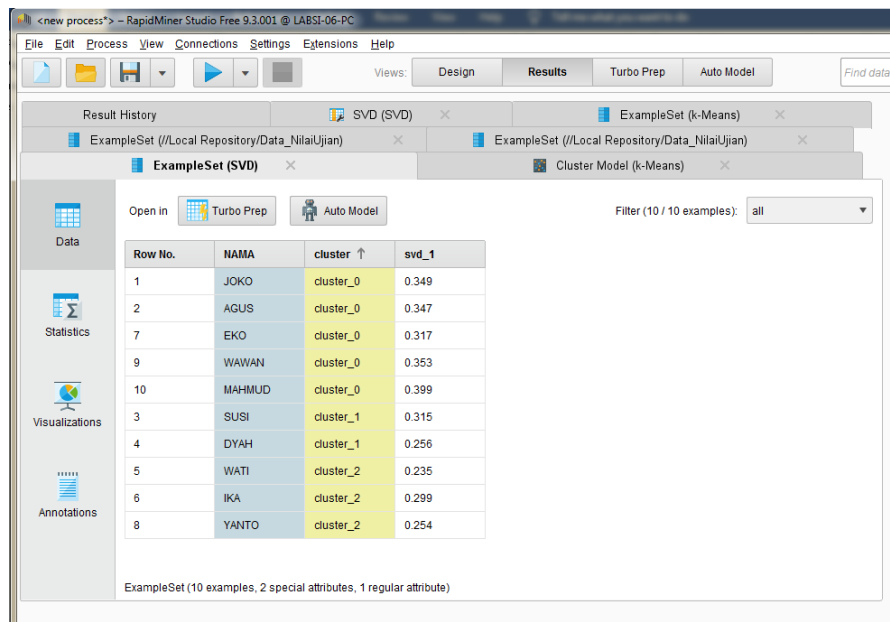
- b. exampleSet (k-Means)
- i. Kelompok siswa bidang B. Indonesia



- ii. Kelompok siswa bidang B. Inggris



c. ExampleSet (SVD)

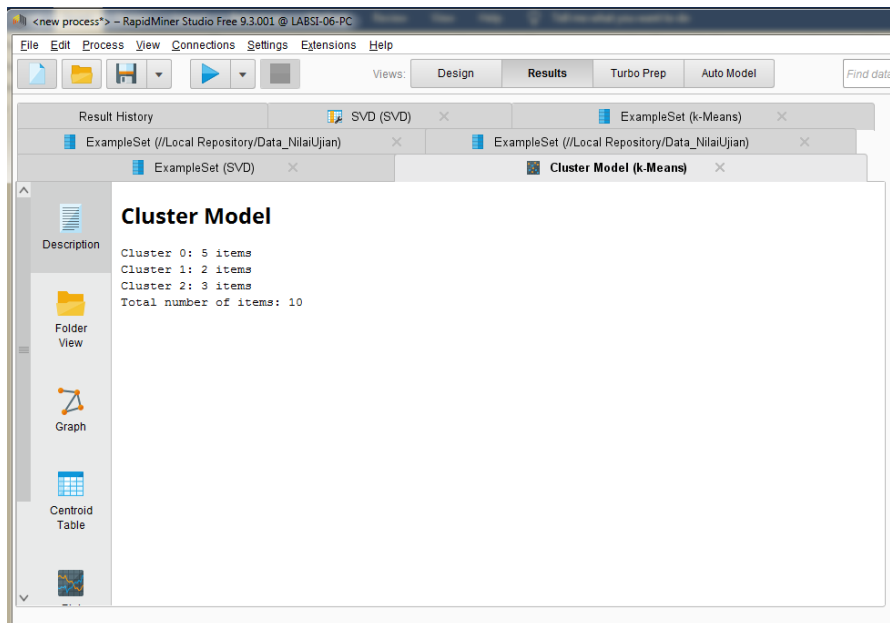


Row No.	NAMA	cluster	svd_1
1	JOKO	cluster_0	0.349
2	AGUS	cluster_0	0.347
7	EKO	cluster_0	0.317
9	WAWAN	cluster_0	0.353
10	MAHMUD	cluster_0	0.399
3	SUSI	cluster_1	0.315
4	DYAH	cluster_1	0.256
5	WATI	cluster_2	0.235
6	IKA	cluster_2	0.299
8	YANTO	cluster_2	0.254

ExampleSet (10 examples, 2 special attributes, 1 regular attribute)

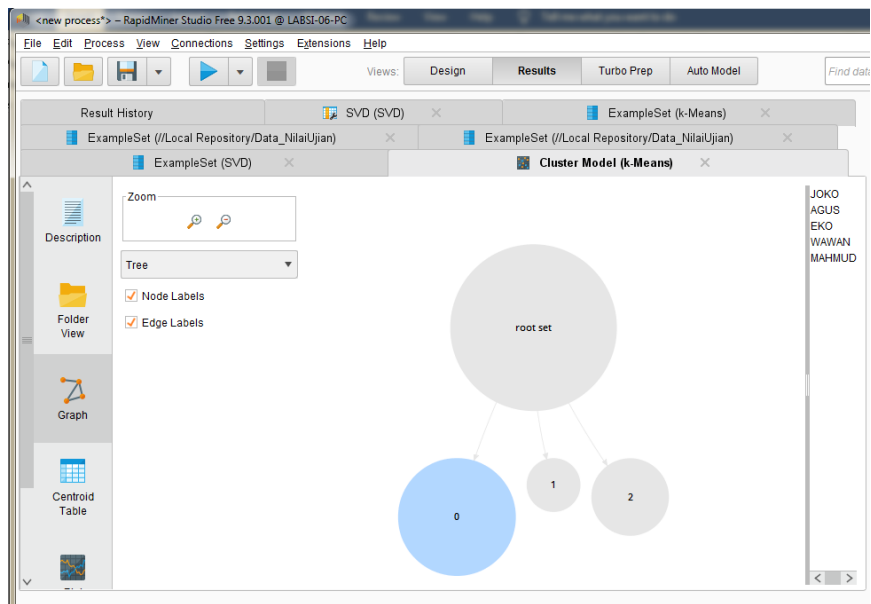
d. Cluster Model

i. Description



Cluster Model	
Cluster 0:	5 items
Cluster 1:	2 items
Cluster 2:	3 items
Total number of items:	10

ii. Graph



# Tugas

## 1. Mengubah kolom NAMA menjadi id

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>	MTK <i>real</i>	IPA <i>real</i>
1	JOKO	5.730	5.806	8.672	7.323
2	AGUS	9.983	6.269	6.292	9.337
3	SUSI	9.693	7.124	5.314	8.320
4	DYAH	6.380	6.870	9.233	7.259
5	WATI	5.278	7.240	6.739	5.283
6	IKA	6.806	5.736	8.366	7.540
7	EKO	9.939	7.921	6.431	7.471
8	YANTO	6.081	7.032	5.292	6.109
9	WAWAM	5.259	9.546	7.410	9.214
10	MAHMUD	6.465	8.550	8.223	9.122
11	BUDI	8.031	6.563	7.539	6.136
12	SANTI	6.626	7.276	5.380	8.719
13	DIAN	7.110	6.400	9.607	7.344

no problems.

Previous Next Cancel

Hasilnya :

new process - RapidMiner Studio Free 9.3.001 © LABSI-06-PC

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

ExampleSet (/Local Repository/Data\_NilaiUjian) ExampleSet (/Local Repository/Data\_NilaiUjian) ExampleSet (k-Means) ExampleSet (SVD) Cluster Model (k-Means) SVD (SVD)

Result History ExampleSet (/Local Repository/Data\_NilaiUjian30Siswa.xls) SVD (SVD)

Open in Turbo Prep Auto Model

Filter (30 / 30 examples): all

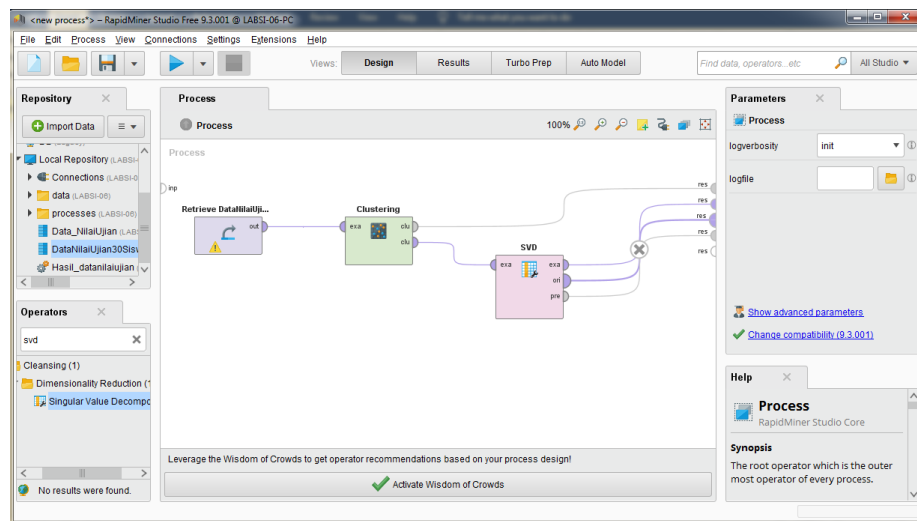
Row No.	NAMA	B.IND	B.ING	MTK	IPA
1	JOKO	5.730	5.806	8.672	7.323
2	AGUS	9.983	6.269	6.292	9.337
3	SUSI	9.693	7.124	5.314	8.320
4	DYAH	6.380	6.870	9.233	7.259
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10	MAHMUD	6.465	8.550	8.223	9.122
11	BUDI	8.031	6.563	7.539	6.136

ExampleSet (30 examples, 1 special attribute, 4 regular attributes)

Repository

- Import Data
- Training Resources (connected)
- Samples
- Community Samples (connected)
- DB (Legacy)
- Local Repository (LABSI-06)
  - Connections (LABSI-06)
  - data (LABSI-06)
  - processes (LABSI-06)
    - Data\_NilaiUjian (LABSI-06 - v1, 11)
    - Data\_NilaiUjian30Siswa.xls (LABSI-06 - v1)
    - Hasil\_datanilaiujian (LABSI-06 - v1)

2. Memasukan Data\_NilaiUjian ke dalam area process. Dengan menambahkan operator k-Means dan operator SVD



5. Hasil proses Clustering pada
  - a. SVD (Singular Value Decomposition)
    - i. Nilai Eigenvalue

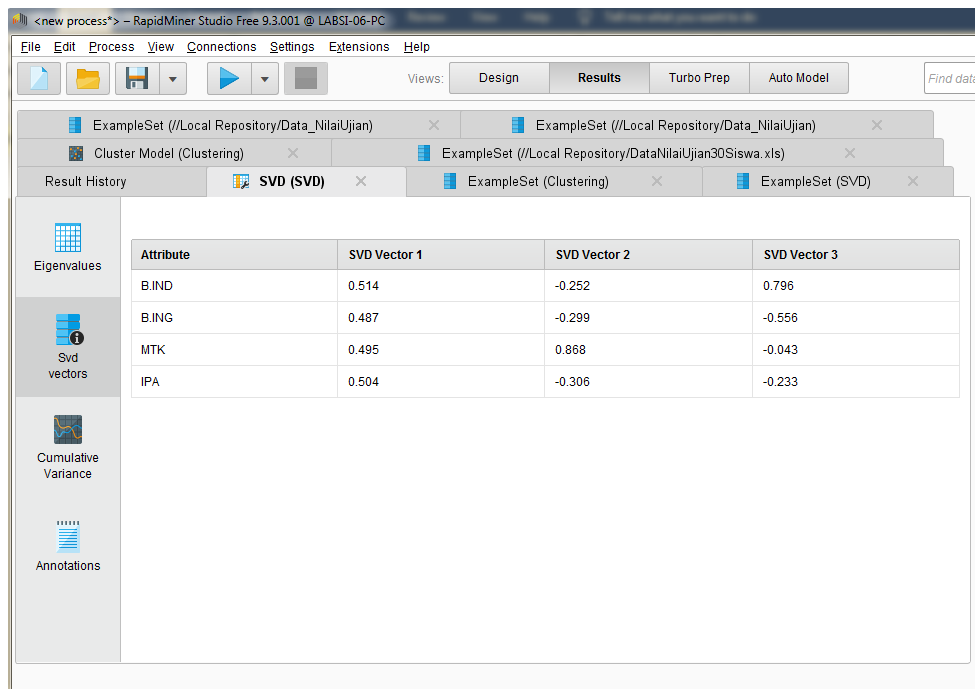
Result History: SVD (SVD)

Component	Singular Value	Proportion of Singular V...	Cumulative Singular Val...	Cumulative Proportion o...
SVD 1	81.332	0.775	81.332	0.775
SVD 2	10.116	0.096	91.447	0.871
SVD 3	8.004	0.076	99.451	0.947
SVD 4	5.521	0.053	104.972	1.000

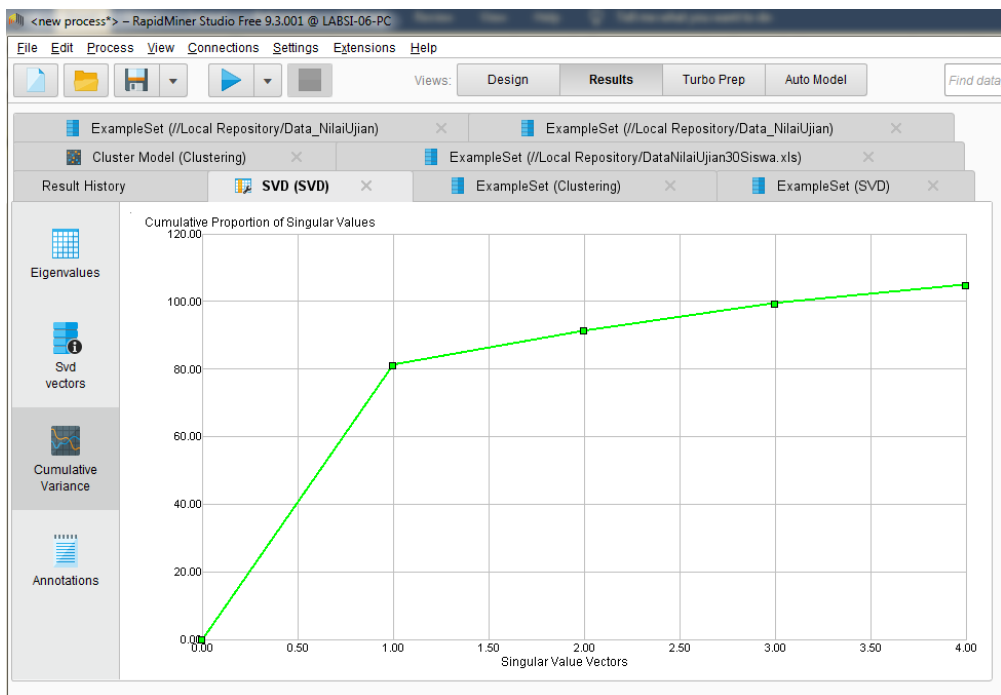
Left sidebar icons: Eigenvalues, Svd vectors, Cumulative Variance, Annotations.



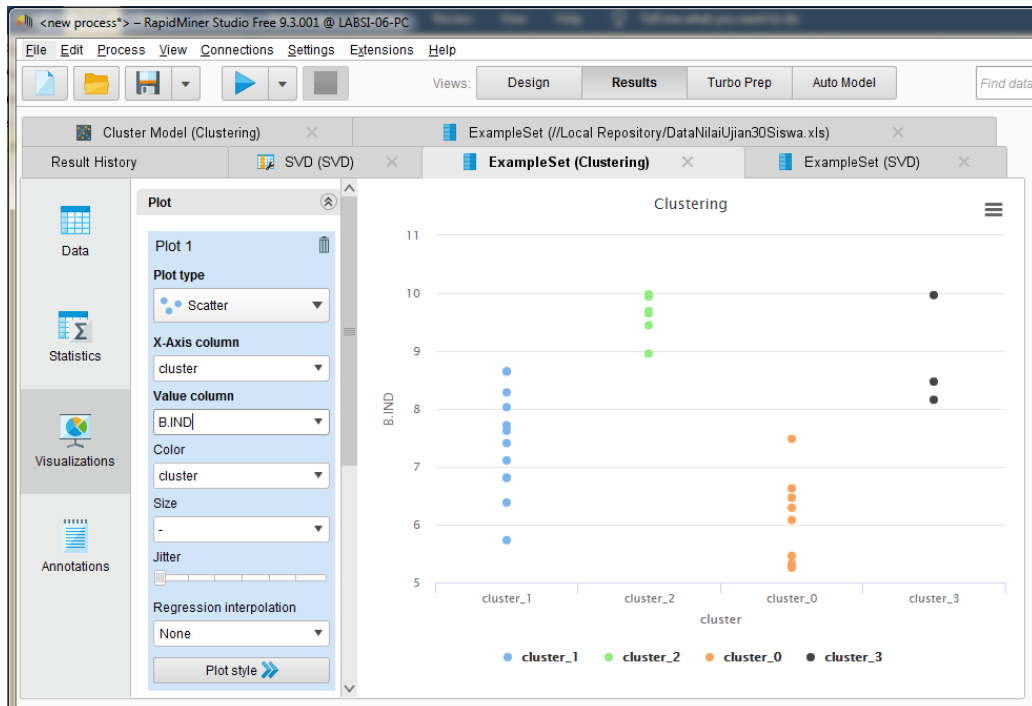
## ii. Svd vectors



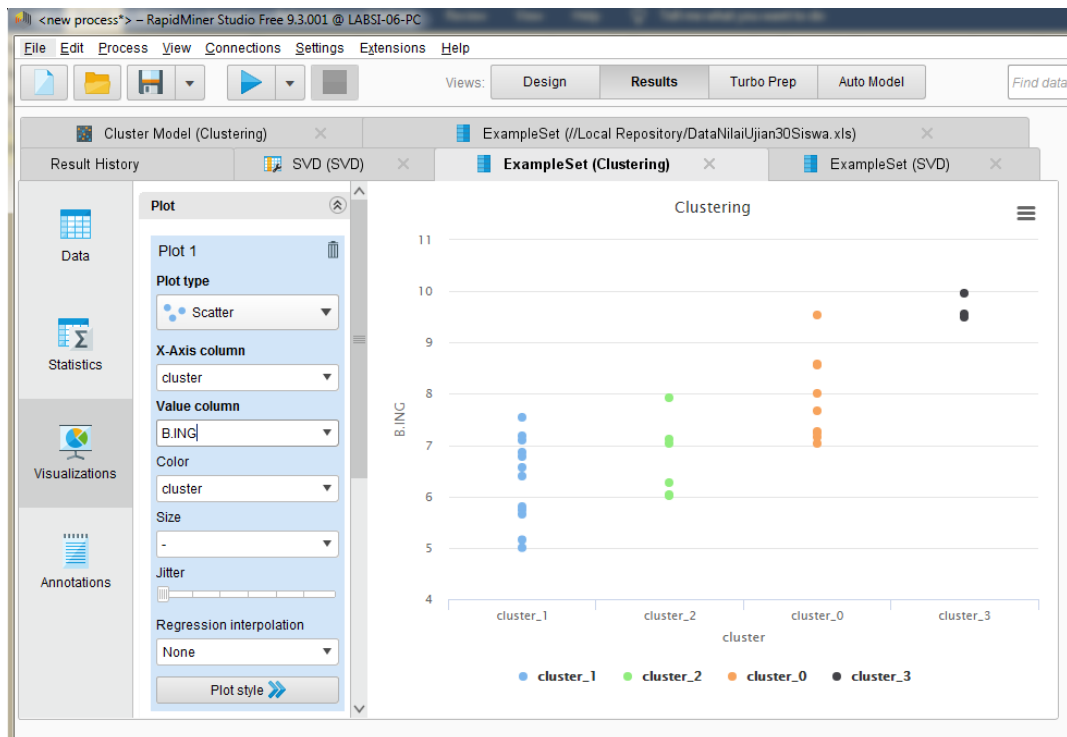
## iii. Cumulative variance



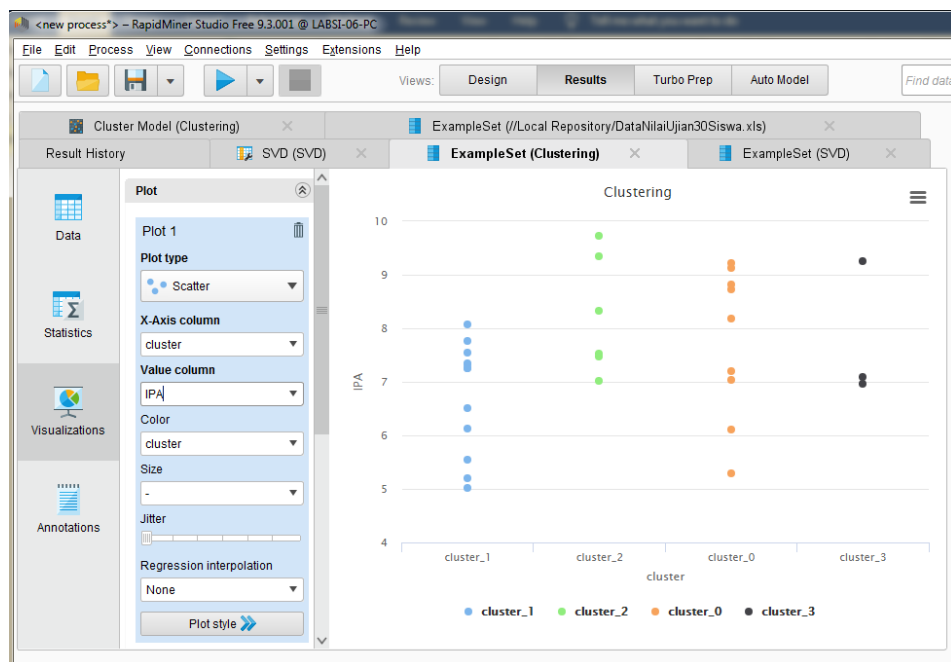
- b. Hasil pada exampleSet (k-Means)
- i. Data pada B.Indonesia



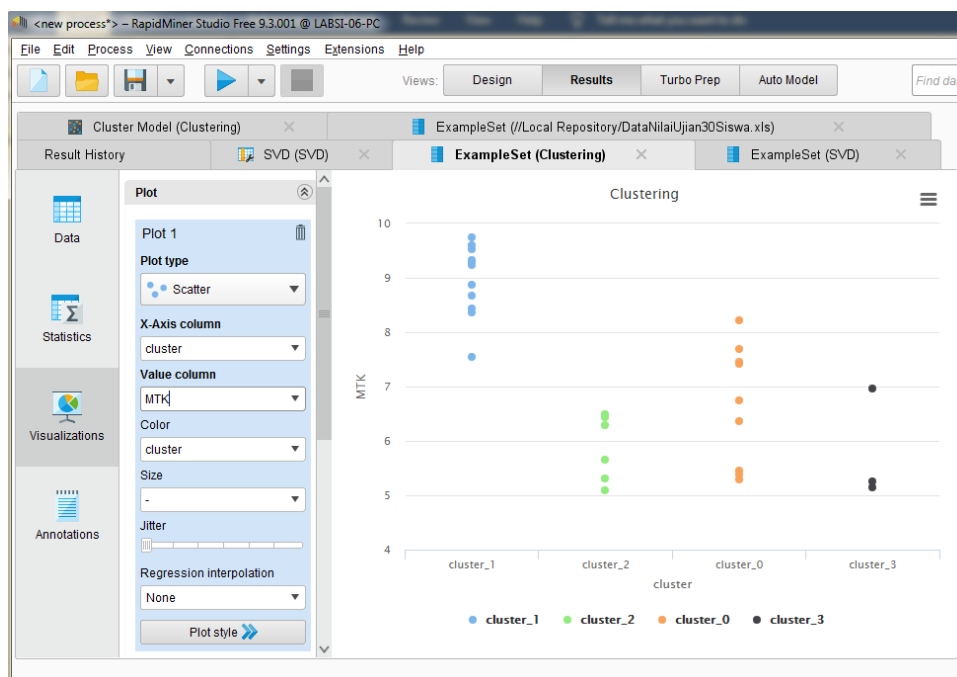
- ii. Data pada B. Inggris



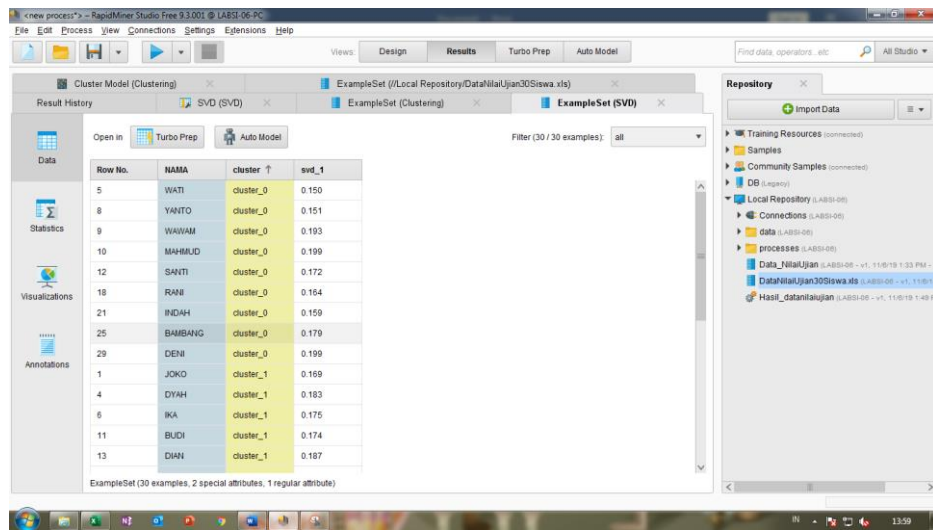
### iii. Data pada IPA



### iv. Data pada Matematika



c. Hasil ExampleSet (SVD)

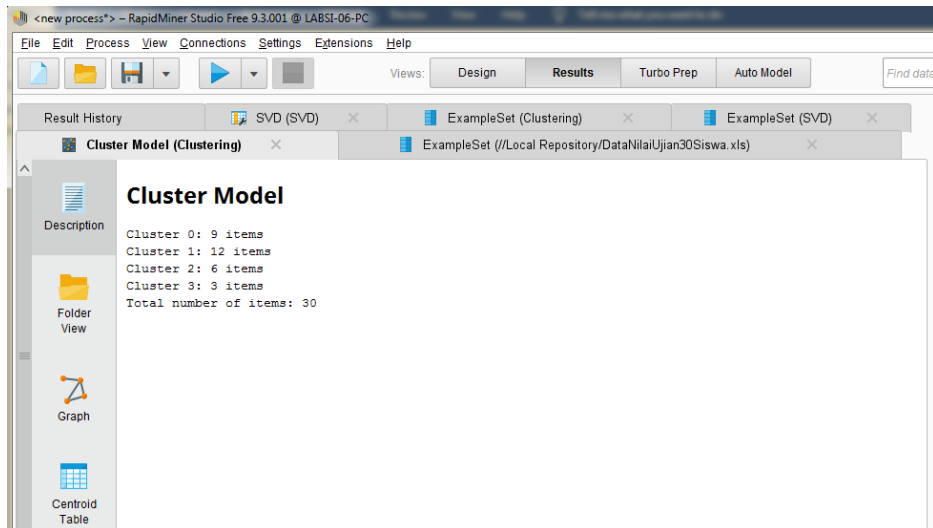


ExampleSet (30 examples, 2 special attributes, 1 regular attribute)

Row No.	NAMA	cluster	svd_1
5	WATI	cluster_0	0.150
8	YANTO	cluster_0	0.151
9	WAWAM	cluster_0	0.193
10	MAHMUD	cluster_0	0.199
12	SAITI	cluster_0	0.172
18	RANI	cluster_0	0.164
21	INDAH	cluster_0	0.159
25	BAKBANG	cluster_0	0.179
29	DENI	cluster_0	0.199
1	JOKO	cluster_1	0.169
4	DYAH	cluster_1	0.183
6	KA	cluster_1	0.175
11	BUDI	cluster_1	0.174
13	DIAN	cluster_1	0.187

d. Hasil Cluster Model

i. Description



**Cluster Model**

Description

Cluster 0: 9 items  
Cluster 1: 12 items  
Cluster 2: 6 items  
Cluster 3: 3 items  
Total number of items: 30

## ii. Graph

