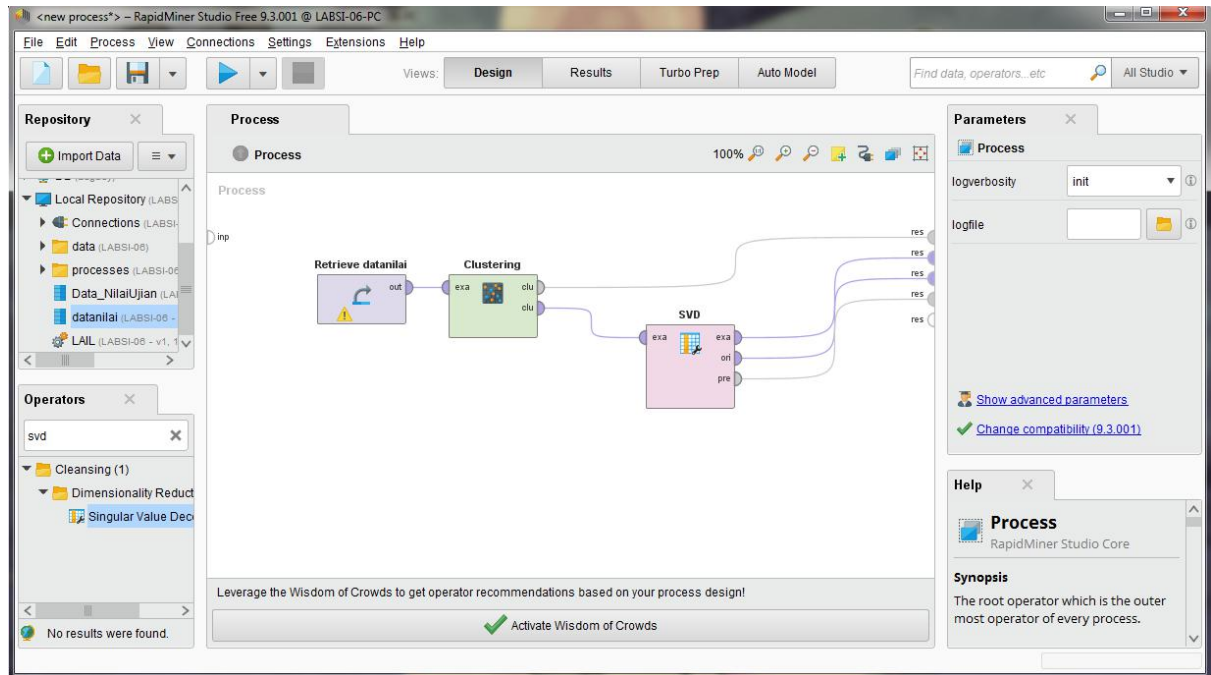


Nama : Lail Nur Rachman  
NIM : L200170137  
Kelas E

## Tugas Modul 10 Clustering : K-Means

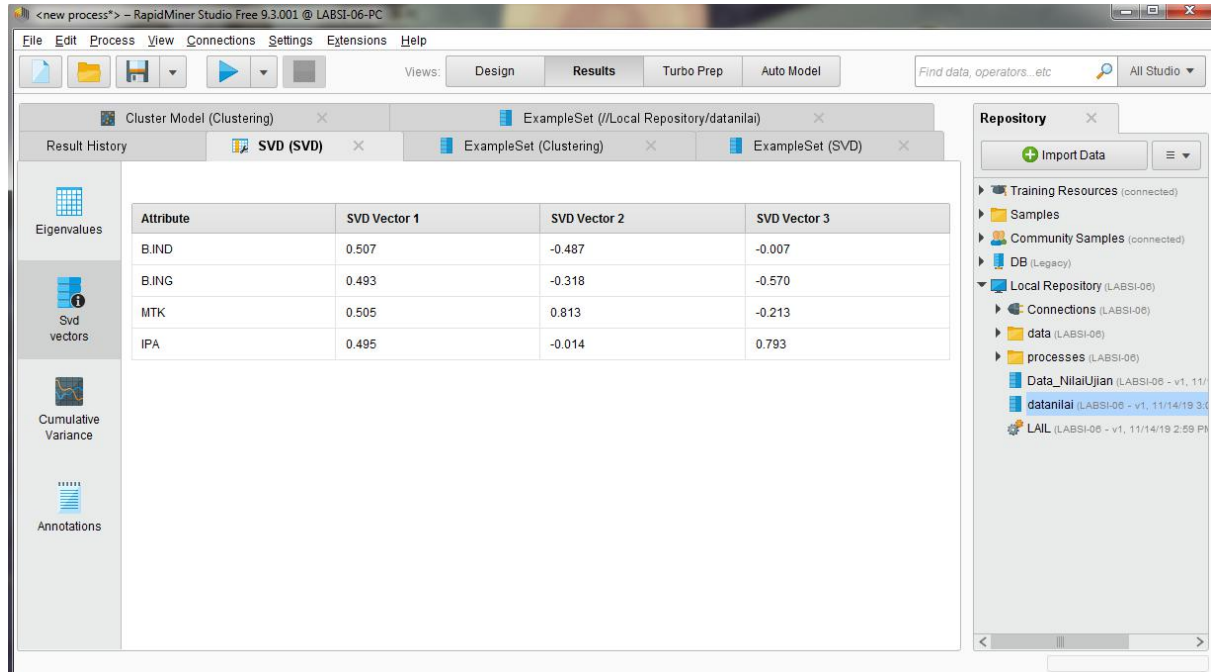


## Nilai EigenValue

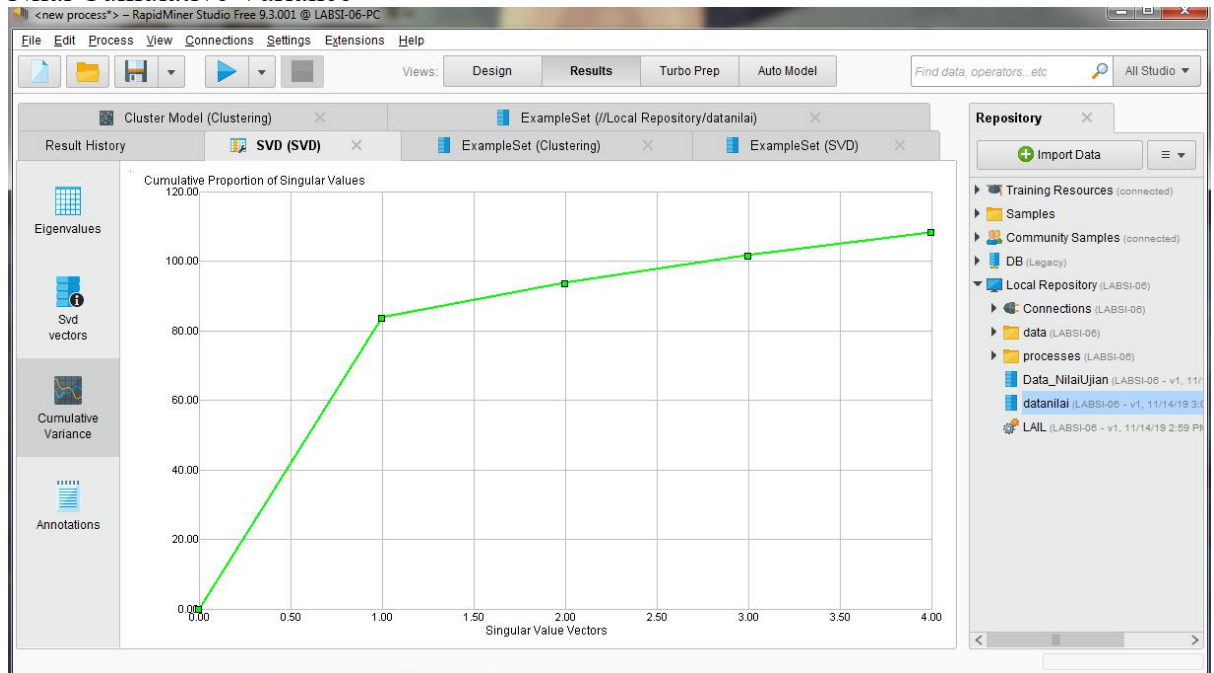
The screenshot shows the 'SVD (SVD)' operator results. The 'Eigenvalues' tab is selected, displaying a table of singular values and their proportions.

Component	Singular Value	Proportion of Singular V...	Cumulative Singular Val...	Cumulative Proportion o...
SVD 1	83.793	0.773	83.793	0.773
SVD 2	9.965	0.092	93.758	0.865
SVD 3	7.949	0.073	101.706	0.938
SVD 4	6.706	0.062	108.412	1.000

## Nilai SVD Vectors



## Nilai Cumulative Variance



## ExampleSet SVD

The screenshot shows the RapidMiner Studio interface with the SVD process applied to an ExampleSet. The main window displays a table of results with 30 examples, 2 special attributes, and 1 regular attribute. The table is filtered to show all 30 examples.

Row No.	NAMA	cluster ↑	svd_1
3	SUSI	cluster_0	0.186
7	EKO	cluster_0	0.197
8	YANTO	cluster_0	0.201
11	BUDI	cluster_0	0.185
13	DIAN	cluster_0	0.181
18	RANI	cluster_0	0.214
19	YANI	cluster_0	0.184
26	HADI	cluster_0	0.189
27	NANA	cluster_0	0.209
29	DENI	cluster_0	0.184
5	WATI	cluster_1	0.187
6	IKA	cluster_1	0.179

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

The screenshot shows the RapidMiner Studio interface with the SVD process applied to an ExampleSet. The main window displays a table of results with 30 examples, 2 special attributes, and 1 regular attribute. The table is filtered to show all 30 examples.

Row No.	NAMA	cluster ↑	svd_1
10	MAHMUD	cluster_1	0.175
20	RATIH	cluster_1	0.184
22	JONO	cluster_1	0.177
23	SARAH	cluster_1	0.201
24	RAMA	cluster_1	0.166
28	FEBRI	cluster_1	0.152
30	TONI	cluster_1	0.163
1	JOKO	cluster_2	0.167
4	DYAH	cluster_2	0.173
9	WAWAN	cluster_2	0.157
12	SANTI	cluster_2	0.179
14	DANI	cluster_2	0.189

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

<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

Cluster Model (Clustering) ExampleSet (/Local Repository/datanilai)

Result History SVD (SVD) ExampleSet (Clustering) ExampleSet (SVD)

Open in Turbo Prep Auto Model

Filter (30 / 30 examples): all

Row No.	NAMA	cluster ↑	svd_1
28	FEBRI	cluster_1	0.152
30	TONI	cluster_1	0.163
1	JOKO	cluster_2	0.167
4	DYAH	cluster_2	0.173
9	WAWAN	cluster_2	0.157
12	SANTI	cluster_2	0.179
14	DANI	cluster_2	0.189
15	AHMAD	cluster_2	0.174
16	BAYU	cluster_2	0.186
17	RISA	cluster_2	0.164
21	INDAH	cluster_2	0.186
25	BAMBANG	cluster_2	0.182

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

Repository

- Import Data
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  - processes (LABSI-06)
    - Data\_NilaiUjian (LABSI-06 - v1, 11/14/19 3:30 PM)
    - datanilai (LABSI-06 - v1, 11/14/19 3:30 PM)
    - LAIL (LABSI-06 - v1, 11/14/19 2:59 PM)

## Cluster Model (Clustering) Description

<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

Cluster Model (Clustering) ExampleSet (/Local Repository/datanilai)

Result History SVD (SVD) ExampleSet (Clustering) ExampleSet (SVD)

Cluster Model

Description

Cluster 0: 11 items  
Cluster 1: 9 items  
Cluster 2: 10 items  
Total number of items: 30

Folder View

Graph

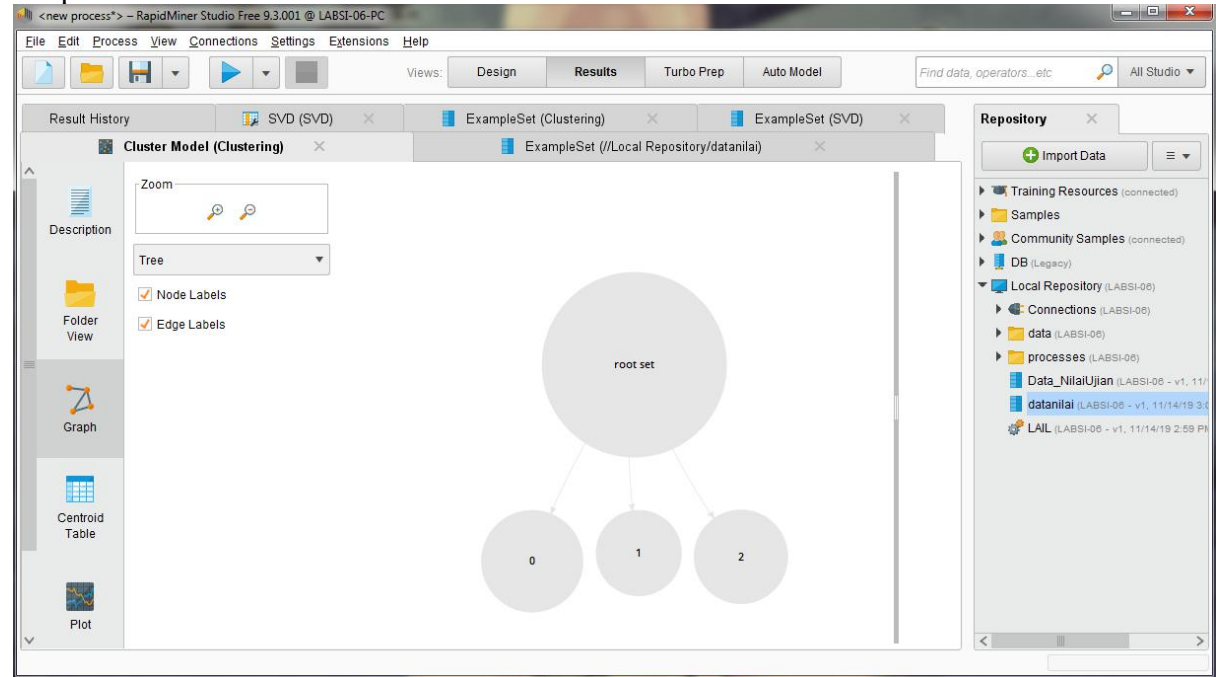
Centroid Table

Plot

Repository

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    - LAIL (LABSI-06 - v1, 11/14/19 2:59 PM)

## Graph



## Interpretasi Hasil Algoritma K-Means

The screenshot shows the 'Results' view of a K-Means clustering model. The main canvas displays a table with 30 examples, grouped into two clusters: cluster\_0 and cluster\_1. The table includes columns for Row No., NAMA, cluster, B.IND, B.ING, MTK, and IPA. The left sidebar contains icons for 'Data', 'Statistics', 'Visualizations', and 'Annotations'. The top toolbar includes buttons for 'Design', 'Results' (selected), 'Turbo Prep', and 'Auto Model'. The 'Repository' panel on the right shows a list of data sources, including 'Local Repository (LABSI-06)' and 'data (LABSI-06)'.

Row No.	NAMA	cluster	B.IND	B.ING	MTK	IPA
2	AGUS	cluster_0	8.464	7.869	6.219	9.062
3	SUSI	cluster_0	6.978	8.740	5.769	9.730
7	EKO	cluster_0	7.866	8.620	6.662	9.946
8	YANTO	cluster_0	7.071	8.490	8.828	9.400
11	BUDI	cluster_0	9.544	5.389	8.963	6.954
13	DIAN	cluster_0	7.822	6.999	6.147	9.428
18	RANI	cluster_0	8.176	8.005	9.908	9.808
19	YANI	cluster_0	8.633	7.361	5.900	8.978
26	HADI	cluster_0	7.967	5.183	9.181	9.333
27	NANA	cluster_0	9.266	6.815	9.331	9.645
29	DENI	cluster_0	8.122	5.578	8.286	8.872
5	WATI	cluster_1	5.926	7.918	9.671	7.764

ExampleSet (30 examples, 2 special attributes, 4 regular attributes)



<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

Cluster Model (Clustering) ExampleSet (/Local Repository/datanilai)

Result History SVD (SVD) ExampleSet (Clustering) ExampleSet (SVD)

Open in Turbo Prep Auto Model Filter (30 / 30 examples): all

Row No.	NAMA	cluster ↑	B.JND	B.JING	MTK	IPA
6	IKA	cluster_1	5.257	8.581	9.403	6.812
10	MAHMUD	cluster_1	5.792	5.559	9.728	8.292
20	RATIH	cluster_1	7.112	7.782	9.691	6.256
22	JONO	cluster_1	6.296	9.395	8.063	5.992
23	SARAH	cluster_1	8.067	9.594	9.726	6.296
24	RAMA	cluster_1	5.332	6.461	9.391	6.668
28	FEBRI	cluster_1	5.698	6.442	7.468	5.945
30	TONI	cluster_1	6.015	6.115	9.547	5.560
1	JOKO	cluster_2	9.375	6.632	6.188	5.805
4	DYAH	cluster_2	7.953	6.835	7.576	6.680
9	WAWAN	cluster_2	8.376	5.724	6.389	5.705
12	SANTI	cluster_2	8.541	9.068	7.091	5.232

ExampleSet (30 examples, 2 special attributes, 4 regular attributes)

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<new process\*> - RapidMiner Studio Free 9.3.001 @ LABSI-06-PC

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Views: Design Results Turbo Prep Auto Model Find data, operators...etc All Studio

Cluster Model (Clustering) ExampleSet (/Local Repository/datanilai)

Result History SVD (SVD) ExampleSet (Clustering) ExampleSet (SVD)

Open in Turbo Prep Auto Model Filter (30 / 30 examples): all

Row No.	NAMA	cluster ↑	B.JND	B.JING	MTK	IPA
28	FEBRI	cluster_1	5.698	6.442	7.468	5.945
30	TONI	cluster_1	6.015	6.115	9.547	5.560
1	JOKO	cluster_2	9.375	6.632	6.188	5.805
4	DYAH	cluster_2	7.953	6.835	7.576	6.680
9	WAWAN	cluster_2	8.376	5.724	6.389	5.705
12	SANTI	cluster_2	8.541	9.068	7.091	5.232
14	DANI	cluster_2	9.419	8.929	5.793	7.513
15	AHMAD	cluster_2	8.610	7.910	6.662	5.896
16	BAYU	cluster_2	8.610	9.211	5.056	8.301
17	RISA	cluster_2	8.051	8.892	5.280	5.228
21	INDAH	cluster_2	8.247	8.404	6.646	7.858
25	BAMBANG	cluster_2	9.858	7.502	6.853	6.285

ExampleSet (30 examples, 2 special attributes, 4 regular attributes)

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