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MODUL 10 Tugas

1. Tabel nilai ujian 3 siswa secara random

	A	B	C	D	E	F	G
1	NO_SISWA	NAMA	B.IND	B.ING	MTK	IPA	
2	S_101	JOKO	9,95	5,40	7,41	8,32	
3	S_102	AGUS	9,37	5,91	8,56	6,43	
4	S_103	SUSI	8,77	5,14	5,38	5,94	
5	S_104	DYAH	7,62	6,02	5,38	9,02	
6	S_105	WATI	9,61	6,45	7,94	8,39	
7	S_106	IKA	7,72	7,22	6,24	8,89	
8	S_107	EKO	5,07	8,25	5,73	7,81	
9	S_108	YANTO	7,42	9,97	8,87	9,70	
10	S_109	WAWAN	5,50	7,04	8,91	8,33	
11	S_110	MAHMUD	8,82	9,13	8,51	9,64	
12	S_111	BUDI	9,17	8,05	5,74	5,55	
13	S_112	SANTI	6,77	5,11	5,52	6,80	
14	S_113	DIAN	7,85	9,90	9,37	5,10	
15	S_114	DANI	8,60	6,21	7,38	7,83	
16	S_115	AHMAD	6,31	8,64	9,23	6,14	
17	S_116	BAYU	8,86	6,67	8,81	5,35	
18	S_117	RISA	6,18	6,86	6,42	7,78	
19	S_118	RANI	9,04	8,00	9,82	7,16	
20	S_119	YANI	5,20	5,24	5,59	8,50	
21	S_120	RATIH	7,96	5,64	8,72	6,15	
22	S_121	INDAH	7,45	6,29	8,15	9,06	
23	S_122	JONO	6,76	8,89	6,39	8,09	
24	S_123	SARAH	8,51	7,64	6,95	6,06	
25	S_124	RAMA	6,42	6,07	7,63	5,89	
26	S_125	BAMBANG	9,06	7,71	8,52	7,41	
27	S_126	HADI	5,41	5,65	6,66	5,48	
28	S_127	NANA	5,81	8,43	7,01	6,43	
29	S_128	FEBRI	7,56	7,84	8,25	7,67	
30	S_129	DENI	9,51	9,82	7,64	6,70	

2. RapidMiner

The screenshot shows the RapidMiner Studio Free 9.3.001 interface. The main workspace displays a process design with the following steps:

- Retrieve Tugas_Nilai...** (Input operator)
- Clustering** (Modeling operator)
- SVD** (Dimensionality Reduction operator)

The **Parameters** panel for the SVD operator is visible, showing:

- dimensionality red...**: fixed number
- dimensions**: 1

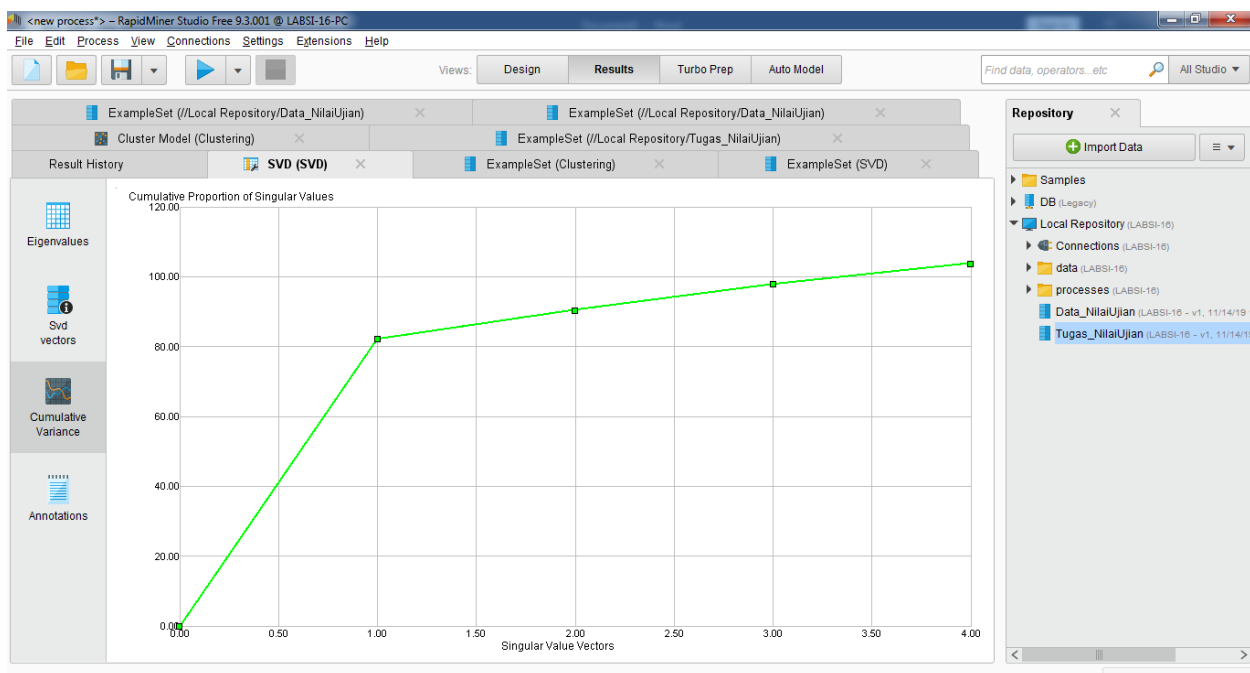
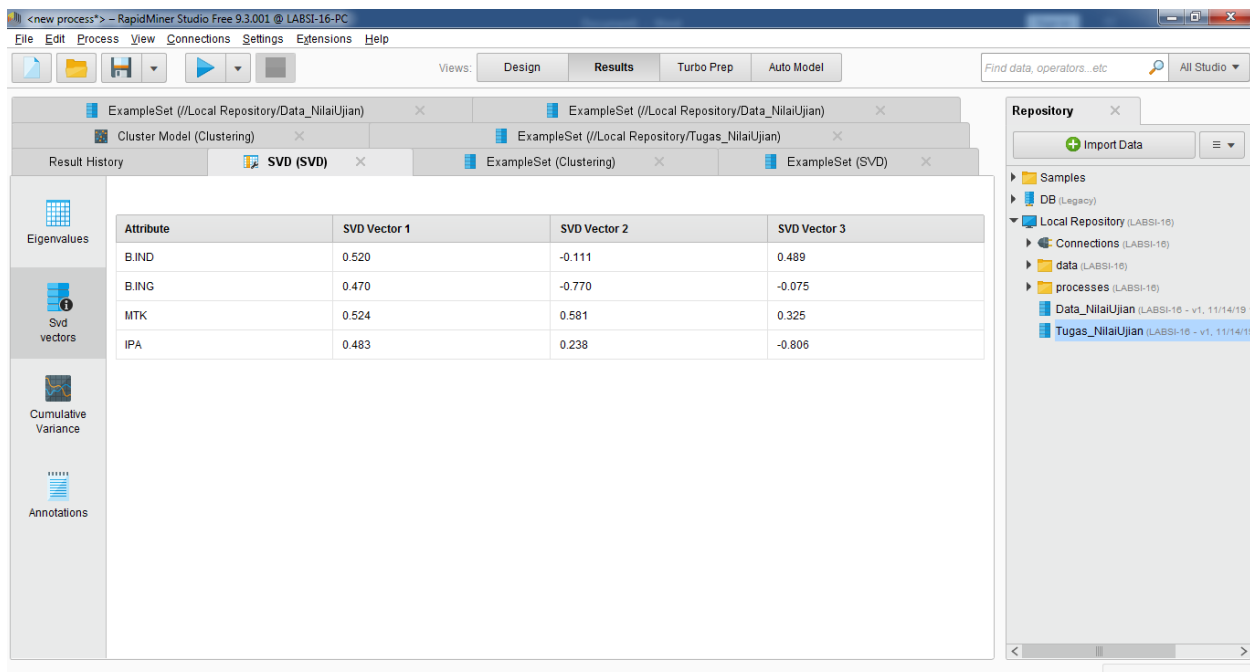
The **Help** panel for SVD (Singular Value Decomposition) is also shown, providing a synopsis of the operator.

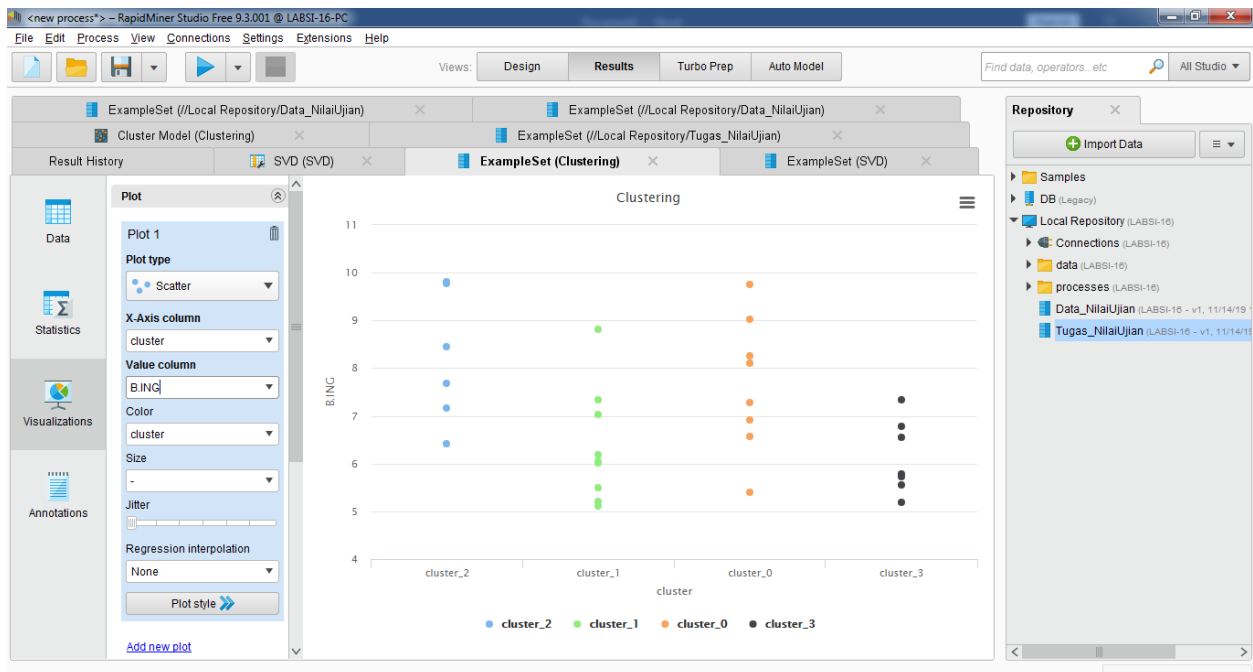
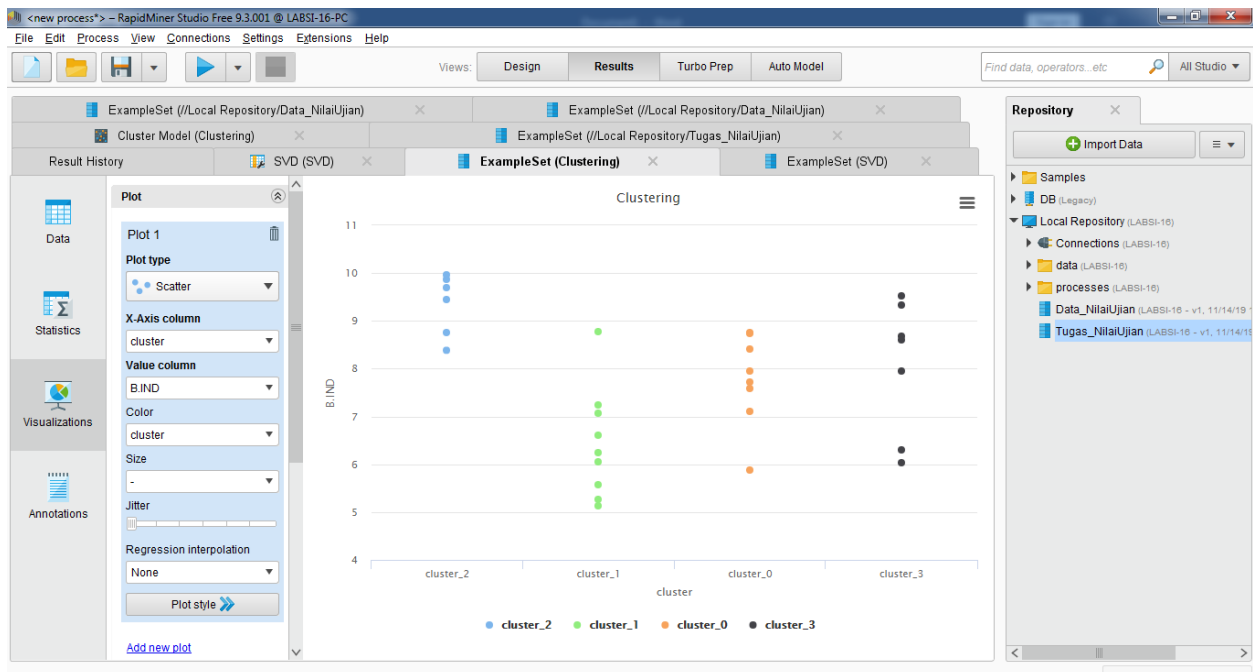
The screenshot shows the **Results** view of the RapidMiner Studio Free 9.3.001 interface. The **Result History** panel shows the following process steps:

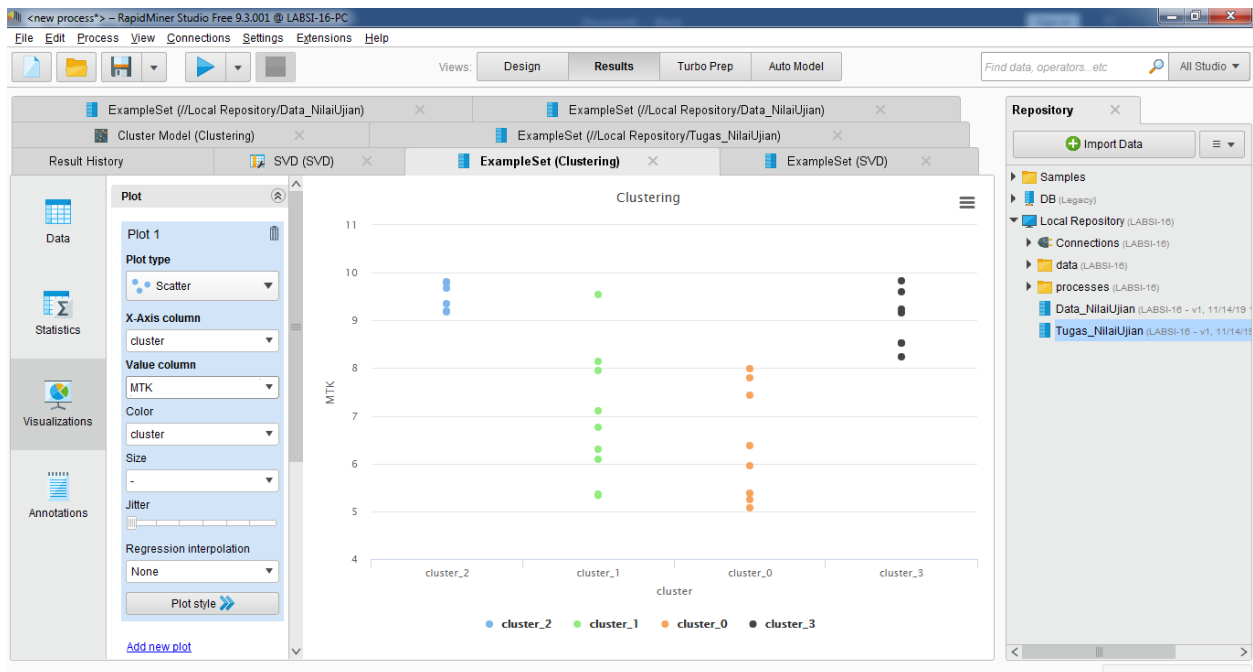
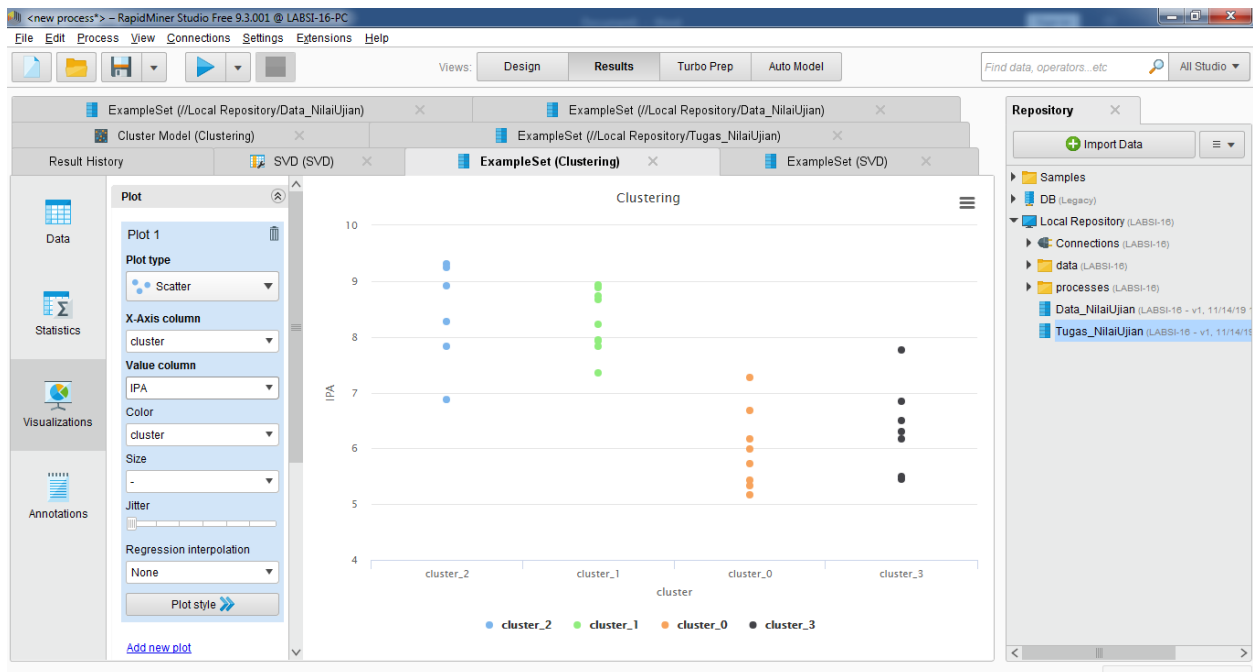
- ExampleSet (//Local Repository/Data_NilaiUjian)
- Cluster Model (Clustering)
- ExampleSet (//Local Repository/Tugas_NilaiUjian)
- ExampleSet (Clustering)
- ExampleSet (SVD)

The **Results** panel displays the output of the SVD operator, showing a table with the following columns:

Component	Singular Value	Proportion of Singular Values	Cumulative Singular Values	Cumulative Proportion of Sin...
SVD 1	82.312	0.792	82.312	0.792
SVD 2	8.172	0.079	90.484	0.871
SVD 3	7.462	0.072	97.947	0.943
SVD 4	5.968	0.057	103.914	1.000







<new process> - RapidMiner Studio Free 9.3.001 @ LABSI-16-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 (/Local Repository/Tugas_NilaiUjian)

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

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

Row No.	NAMA	cluster ↑	B.IND	B.JING	MTK	IPA
3	SUSI	cluster_0	8.761	9.029	5.078	5.329
5	WATI	cluster_0	7.729	6.909	6.373	7.272
6	IKA	cluster_0	7.108	8.261	5.954	5.434
7	EKO	cluster_0	5.887	7.280	7.988	5.985
9	WAWAN	cluster_0	8.412	5.404	5.243	5.728
18	RANI	cluster_0	8.742	8.111	7.799	6.174
20	RATHI	cluster_0	7.584	9.748	5.375	6.686
23	SARAH	cluster_0	7.948	6.575	7.434	5.172
2	AGUS	cluster_1	8.766	6.193	6.296	8.662
8	YANTO	cluster_1	5.266	7.035	6.096	8.886
10	MAHMUD	cluster_1	5.568	5.494	6.760	7.929
12	SANTI	cluster_1	7.247	6.046	7.104	7.838
13	DIAN	cluster_1	6.235	8.819	7.954	8.229

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

Repository

- Import Data
- Samples
- DB (Legacy)
- Local Repository (LABSI-16)
 - Connections (LABSI-16)
 - data (LABSI-16)
 - processes (LABSI-16)
 - Data_NilaiUjian (LABSI-16 - v1, 11/14/19)
 - Tugas_NilaiUjian (LABSI-16 - v1, 11/14/19)

<new process> - RapidMiner Studio Free 9.3.001 @ LABSI-16-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 (/Local Repository/Tugas_NilaiUjian)

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

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

Row No.	NAMA	cluster ↑	B.IND	B.JING	MTK	IPA
13	DIAN	cluster_1	6.235	8.819	7.954	8.229
16	BAYU	cluster_1	7.061	6.022	8.134	8.938
22	JONO	cluster_1	6.607	7.338	5.336	7.949
24	RAMA	cluster_1	5.135	5.214	5.364	7.357
26	HADI	cluster_1	6.056	5.108	9.539	8.736
1	JOKO	cluster_2	8.384	9.815	9.782	6.875
11	BUDI	cluster_2	9.862	7.676	9.172	7.827
14	DANI	cluster_2	9.699	7.158	9.680	8.909
15	AHMAD	cluster_2	8.748	8.450	9.205	8.268
28	FEBRI	cluster_2	9.453	9.779	9.820	9.317
30	TONI	cluster_2	9.960	6.408	9.359	9.251
4	DYAH	cluster_3	9.338	6.785	9.153	5.438
17	RISA	cluster_3	8.679	5.779	8.231	7.768

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

Repository

- Import Data
- Samples
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 - data (LABSI-16)
 - processes (LABSI-16)
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 - Tugas_NilaiUjian (LABSI-16 - v1, 11/14/19)

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



Row No.	NAMA	cluster	B.IND	B.JNG	MTK	IPA
1	JOKO	cluster_2	8.384	9.815	9.782	6.875
11	BUDI	cluster_2	9.862	7.676	9.172	7.827
14	DANI	cluster_2	9.699	7.158	9.680	8.909
15	AHMAD	cluster_2	8.748	8.450	9.205	8.268
28	FEBRI	cluster_2	9.453	9.779	9.820	9.317
30	TONI	cluster_2	9.960	6.408	9.359	9.251
4	DYAH	cluster_3	9.338	6.785	9.153	5.438
17	RISA	cluster_3	8.679	5.779	8.231	7.768
19	YANI	cluster_3	9.516	6.542	9.608	6.306
21	INDAH	cluster_3	7.959	5.186	8.518	6.843
25	BAMBANG	cluster_3	6.303	5.548	8.530	5.503
27	NANA	cluster_3	8.606	5.720	9.228	6.506
29	DENI	cluster_3	6.038	7.337	9.835	6.172

Cluster Model

Cluster 0: 8 items
Cluster 1: 9 items
Cluster 2: 6 items
Cluster 3: 7 items
Total number of items: 30

3. Nama siswa yang terdapat dalam cluster :

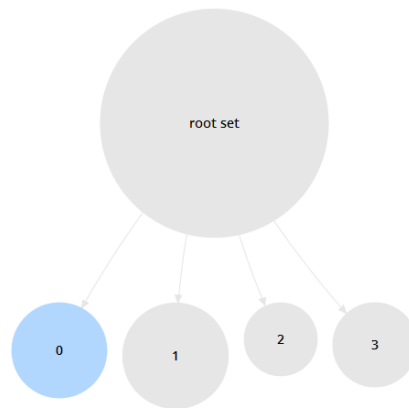
- Cluster 0 : Susi, Wati, Ika, Eko, Wawan, Rani, Ratih, Sarah
- Cluster 1 : Agus, Yanto, Mahmud, Santi, Dian, Bayu, Jono, Rama, Hadi
- Cluster 2 : Joko, Budi, Dani, Ahmad, Febri, Toni
- Cluster 3 : Dyah, Risa, Yani, Indah, Bambang, Nana, Deni

Zoom  



Tree ▼

☒ Node Labels

☒ Edge Labels



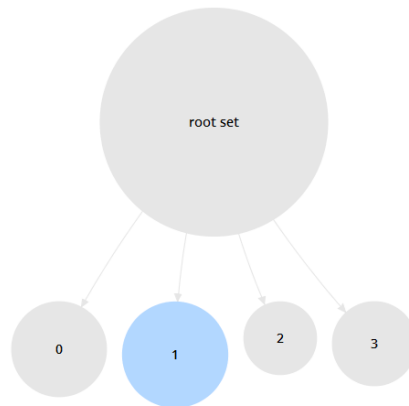
SUSI
WATI
IKA
EKO
WAWAN
RANI
RATIH
SARAH

Zoom  



Tree ▼

☒ Node Labels

☒ Edge Labels



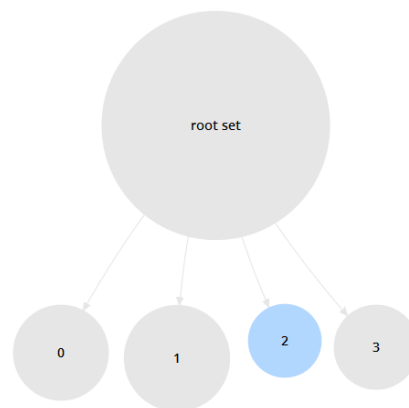
AGUS
YANTO
MAHMUD
SANTI
DIAN
BAYU
JONO
RAMA
HADI

Zoom  

Tree ▼

☒ Node Labels

☒ Edge Labels



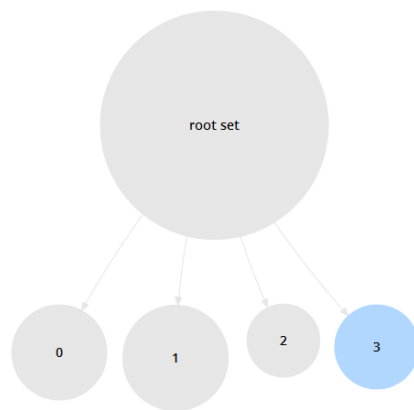
JOKO
BUDI
DANI
AHMAD
FEBRI
TONI

Zoom

Tree

☒ Node Labels

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DYAH
RISA
YANI
INDAH
BAMBANG
NANA
DENI