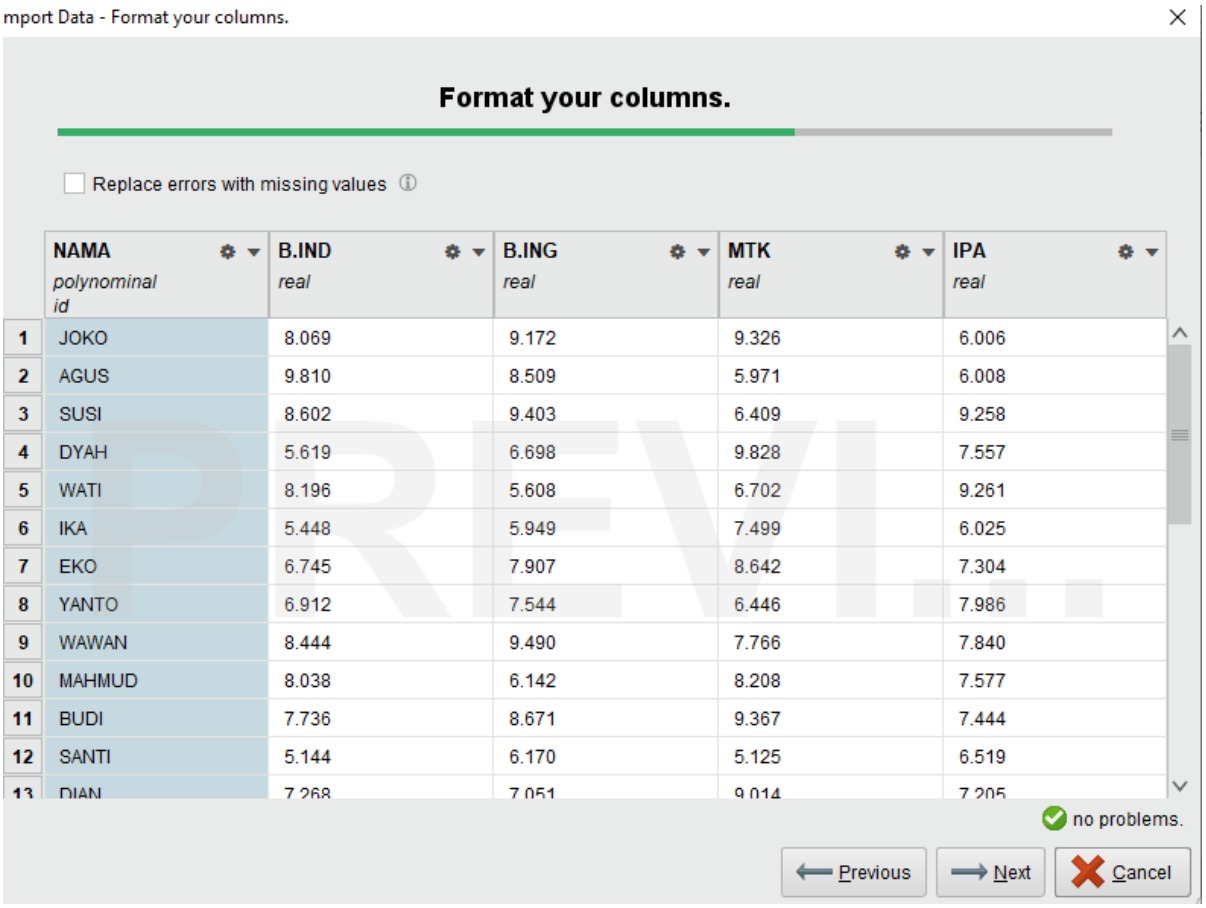
Nama : Kurnia Feby Vidayanto
NIM : L200170102

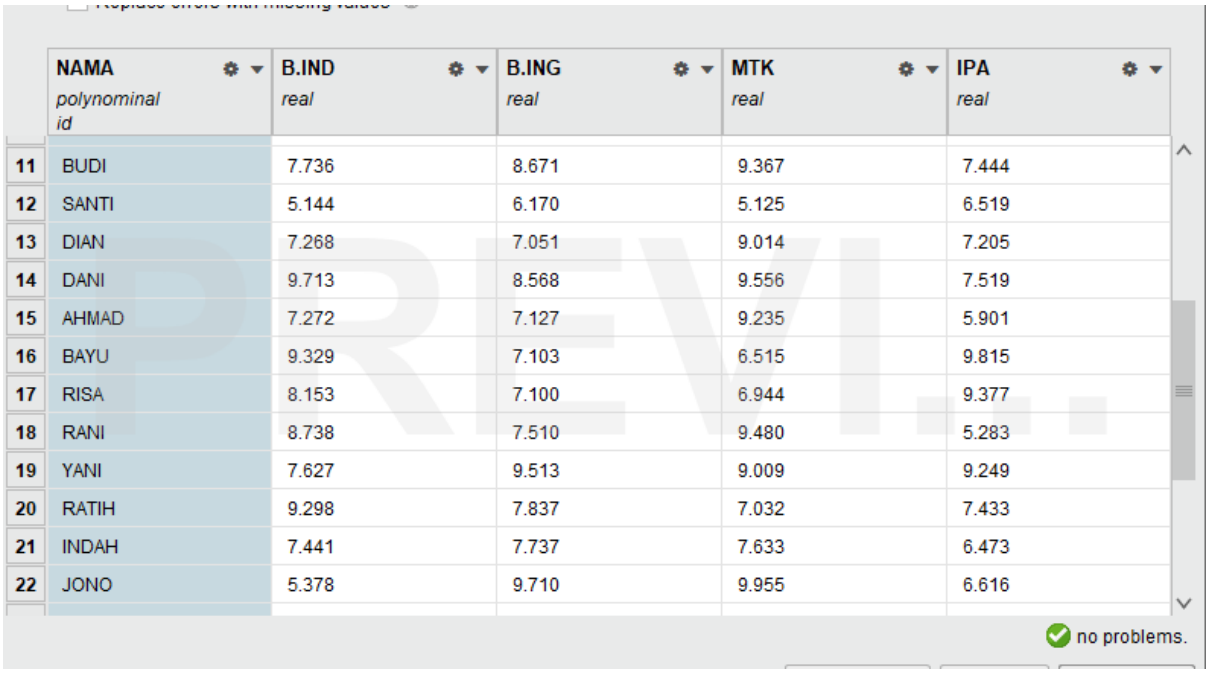
TUGAS
1. membuat table Data Nilai ujian 30 siswa

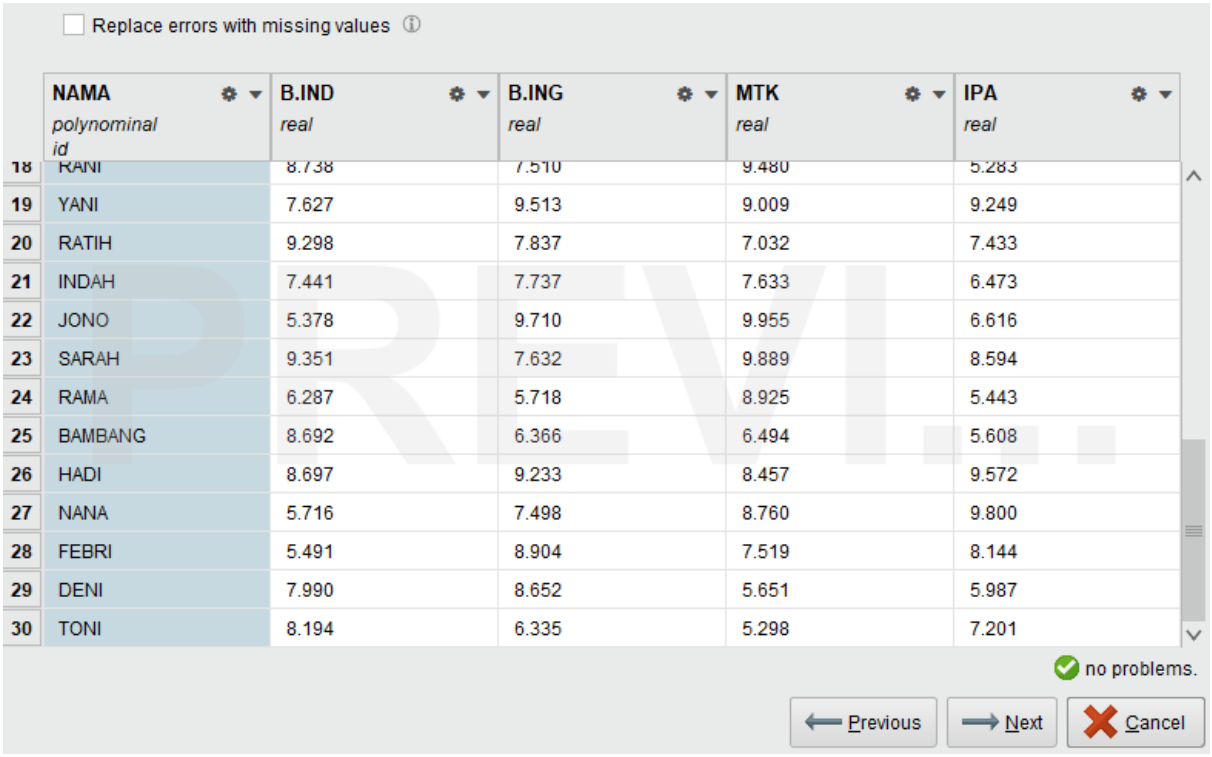
NO_SISWA	NAMA	B.IND	B.ING	MTK	IPA
S_101	JOKO	9,83	5,16	6,75	7,24
S_102	AGUS	7,15	8,54	6,37	8,62
S_103	SUSI	8,33	9,83	9,01	8,21
S_104	DYAH	8,88	7,72	7,48	5,25
S_105	WATI	6,34	8,90	9,34	6,43
S_106	IKA	7,92	8,22	7,77	9,19
S_107	EKO	9,80	7,47	9,08	5,48
S_108	YANTO	7,33	5,71	7,65	7,29
S_109	WAWAN	5,25	8,68	8,76	6,74
S_110	MAHMUD	6,89	5,89	9,96	8,50
S_111	BUDI	8,87	8,26	9,76	8,99
S_112	SANTI	8,83	5,42	9,35	8,33
S_113	DIAN	6,49	5,45	7,36	9,85
S_114	DANI	7,80	9,24	7,64	6,11
S_115	AHMAD	7,53	5,52	7,48	8,54
S_116	BAYU	9,41	9,99	7,91	6,36
S_117	RISA	8,98	8,63	9,51	6,07
S_118	RANI	6,00	8,82	9,07	7,91
S_119	YANI	7,62	8,70	5,68	6,37
S_120	RATIH	6,19	7,49	7,13	5,24
S_121	INDAH	8,04	6,86	6,74	5,74
S_122	JONO	7,23	9,69	7,40	9,15
S_123	SARAH	6,99	5,92	8,32	6,02
S_124	RAMA	5,36	6,52	7,73	9,92

8	S_107	EKO	9,80	7,47	9,08	5,48
9	S_108	YANTO	7,33	5,71	7,65	7,29
10	S_109	WAWAN	5,25	8,68	8,76	6,74
11	S_110	MAHMUD	6,89	5,89	9,96	8,50
12	S_111	BUDI	8,87	8,26	9,76	8,99
13	S_112	SANTI	8,83	5,42	9,35	8,33
14	S_113	DIAN	6,49	5,45	7,36	9,85
15	S_114	DANI	7,80	9,24	7,64	6,11
16	S_115	AHMAD	7,53	5,52	7,48	8,54
17	S_116	BAYU	9,41	9,99	7,91	6,36
18	S_117	RISA	8,98	8,63	9,51	6,07
19	S_118	RANI	6,00	8,82	9,07	7,91
20	S_119	YANI	7,62	8,70	5,68	6,37
21	S_120	RATIH	6,19	7,49	7,13	5,24
22	S_121	INDAH	8,04	6,86	6,74	5,74
23	S_122	JONO	7,23	9,69	7,40	9,15
24	S_123	SARAH	6,99	5,92	8,32	6,02
25	S_124	RAMA	5,36	6,52	7,73	9,92
26	S_125	BAMBANG	9,04	7,85	9,40	7,52
27	S_126	HADI	6,18	8,03	9,85	9,29
28	S_127	NANA	7,37	6,17	7,97	9,75
29	S_128	FEBRI	8,43	8,73	9,27	5,94
30	S_129	DENI	6,64	7,04	8,60	8,77
31	S_130	TONI	6,76	7,41	5,76	9,85
32						

2. import data ke rapid miner.


mport Data - Format your columns.
Format your columns.
Replace errors with missing values
NAMA polynominal id
B.IND real
B.ING real
MTK real
IPA real
1 JOKO 8.069 9.172 9.326 6.006
2 AGUS 9.810 8.509 5.971 6.008
3 SUSI 8.602 9.403 6.409 9.258
4 DYAH 5.619 6.698 9.828 7.557
5 WATI 8.196 5.608 6.702 9.261
6 IKA 5.448 5.949 7.499 6.025
7 EKO 6.745 7.907 8.642 7.304
8 YANTO 6.912 7.544 6.446 7.986
9 WAWAN 8.444 9.490 7.766 7.840
10 MAHMUD 8.038 6.142 8.208 7.577
11 BUDI 7.736 8.671 9.367 7.444
12 SANTI 5.144 6.170 5.125 6.519
13 DIAN 7.268 7.051 9.014 7.205
no problems.
Previous
Next
Cancel


NAMA polynominal id
B.IND real
B.ING real
MTK real
IPA real
11 BUDI 7.736 8.671 9.367 7.444
12 SANTI 5.144 6.170 5.125 6.519
13 DIAN 7.268 7.051 9.014 7.205
14 DANI 9.713 8.568 9.556 7.519
15 AHMAD 7.272 7.127 9.235 5.901
16 BAYU 9.329 7.103 6.515 9.815
17 RISA 8.153 7.100 6.944 9.377
18 RANI 8.738 7.510 9.480 5.283
19 YANI 7.627 9.513 9.009 9.249
20 RATIH 9.298 7.837 7.032 7.433
21 INDAH 7.441 7.737 7.633 6.473
22 JONO 5.378 9.710 9.955 6.616
no problems.



3.

Row No.	NAMA	B.IND	B.ING	MTK	IPA
1	JOKO	8.069	9.172	9.326	6.006
2	AGUS	9.810	8.509	5.971	6.008
3	SUSI	8.602	9.403	6.409	9.258
4	DYAH	5.619	6.698	9.828	7.557
5	WATI	8.196	5.608	6.702	9.261
6	IKA	5.448	5.949	7.499	6.025
7	EKO	6.745	7.907	8.642	7.304
8	YANTO	6.912	7.544	6.446	7.986
9	WAWAN	8.444	9.490	7.766	7.840
10	MAHMUD	8.038	6.142	8.208	7.577
11	BUDI	7.736	8.671	9.367	7.444
12	SANTI	5.144	6.170	5.125	6.519
13	DIAN	7.268	7.051	9.014	7.205

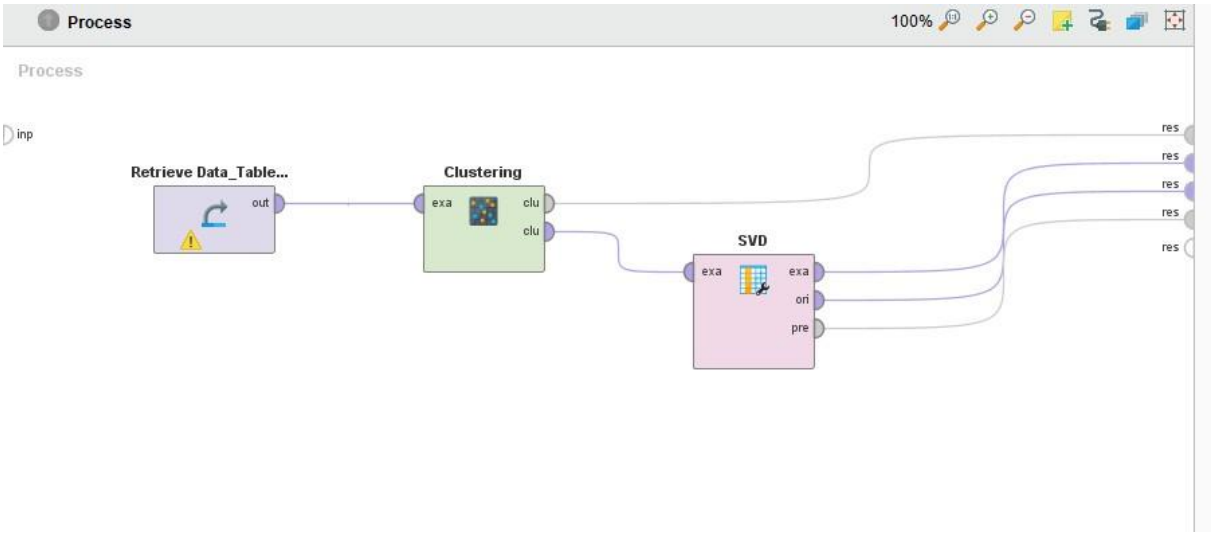
Row No.	NAMA	B.IND	B.ING	MTK	IPA
13	DIAN	7.268	7.051	9.014	7.265
14	DANI	9.713	8.568	9.556	7.519
15	AHMAD	7.272	7.127	9.235	5.901
16	BAYU	9.329	7.103	6.515	9.815
17	RISA	8.153	7.100	6.944	9.377
18	RANI	8.738	7.510	9.480	5.283
19	YANI	7.627	9.513	9.009	9.249
20	RATIH	9.298	7.837	7.032	7.433
21	INDAH	7.441	7.737	7.633	6.473
22	JONO	5.378	9.710	9.955	6.616
23	SARAH	9.351	7.632	9.889	8.594
24	RAMA	6.287	5.718	8.925	5.443
25	BAMBANG	8.692	6.366	6.494	5.608
26	HADI	8.697	9.233	8.457	9.572

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

Row No.	NAMA	B.IND	B.ING	MTK	IPA
18	RANI	8.738	7.510	9.480	5.283
19	YANI	7.627	9.513	9.009	9.249
20	RATIH	9.298	7.837	7.032	7.433
21	INDAH	7.441	7.737	7.633	6.473
22	JONO	5.378	9.710	9.955	6.616
23	SARAH	9.351	7.632	9.889	8.594
24	RAMA	6.287	5.718	8.925	5.443
25	BAMBANG	8.692	6.366	6.494	5.608
26	HADI	8.697	9.233	8.457	9.572
27	NANA	5.716	7.498	8.760	9.800
28	FEBRI	5.491	8.904	7.519	8.144
29	DENI	7.990	8.652	5.651	5.987
30	TONI	8.194	6.335	5.298	7.201

4. tambahkan operator –means. Hubungkan output operator retrieve ke entry exa operator ini dan output clu(cluster model) dihubungkan ke connector res panel. Ubah nilai parameter k =3 pada operator ini

5. tambahkan operator SVD. Lalu hubungkan output clu ke-2 operator clustering (k-means) kedalam entry exa operator SVD dan 3 port output exa,ori, dan pre terhadap konektor



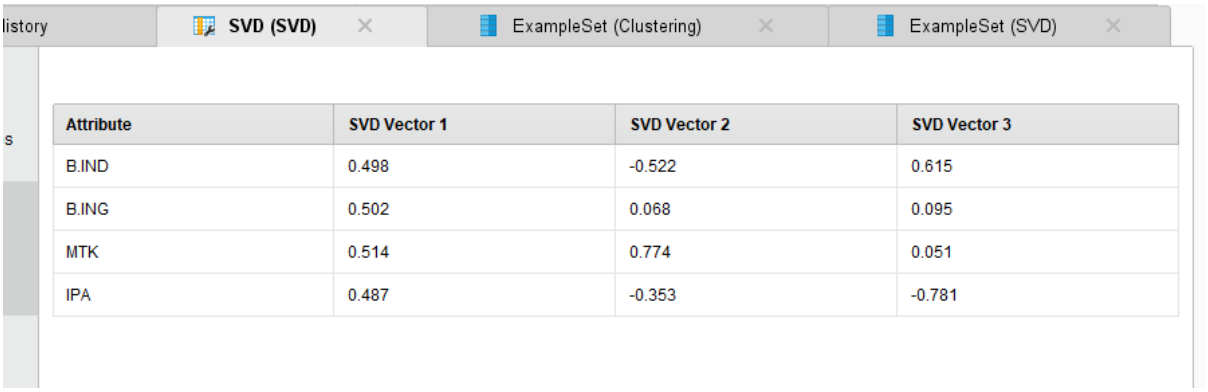
6. hasil proses clustering dengan algoritma K-means

a) SVD

i. nilai Eigenvalue

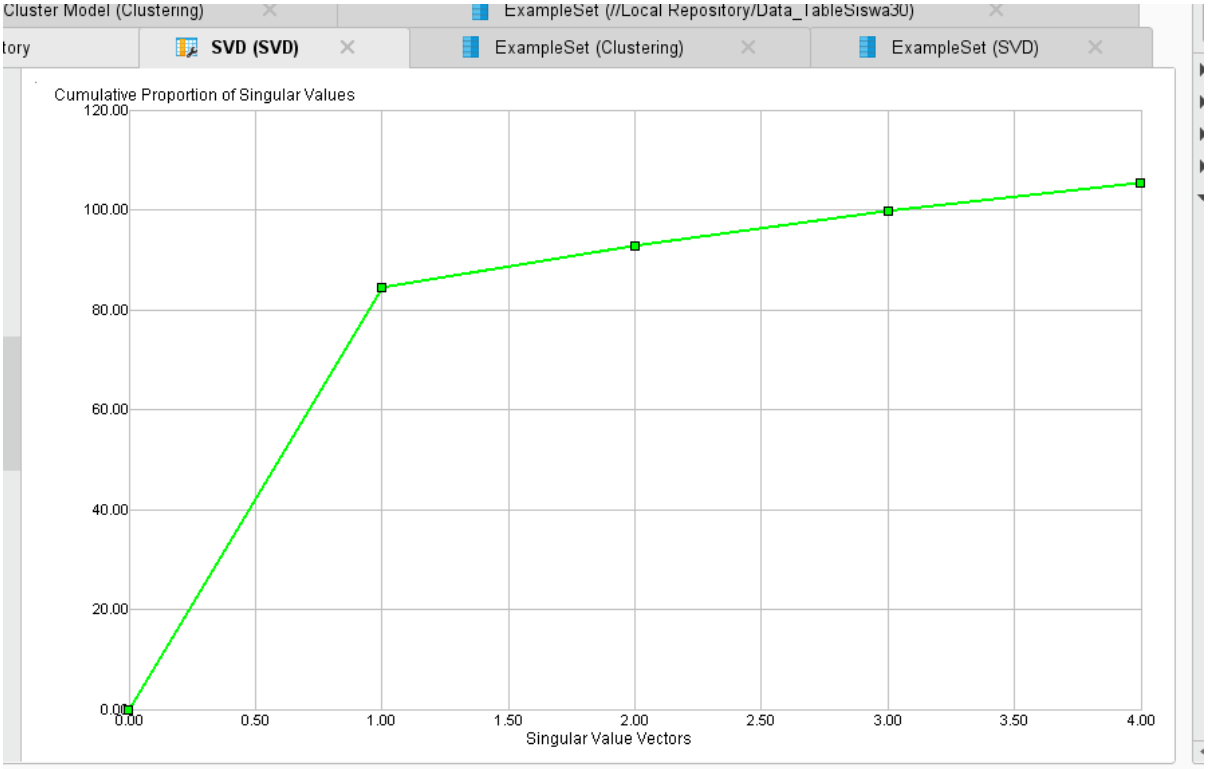
Component	Singular Value	Proportion of Singular V...	Cumulative Singular Val...	Cumulative Proportion o...
SVD 1	84.502	0.801	84.502	0.801
SVD 2	8.430	0.080	92.933	0.881
SVD 3	6.944	0.066	99.876	0.947
SVD 4	5.599	0.053	105.475	1.000

7. Nilai Svd vector



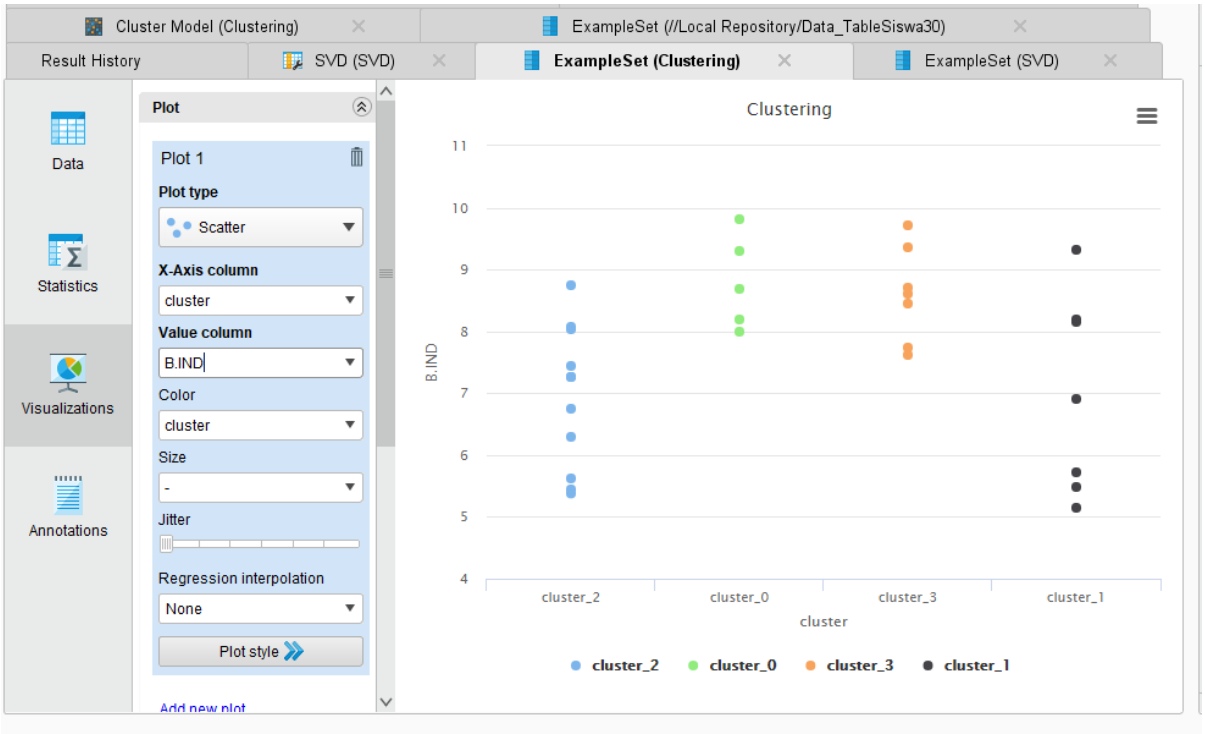
Attribute	SVD Vector 1	SVD Vector 2	SVD Vector 3
B.IND	0.498	-0.522	0.615
B.ING	0.502	0.068	0.095
MTK	0.514	0.774	0.051
IPA	0.487	-0.353	-0.781

8. nilai cumulative variance

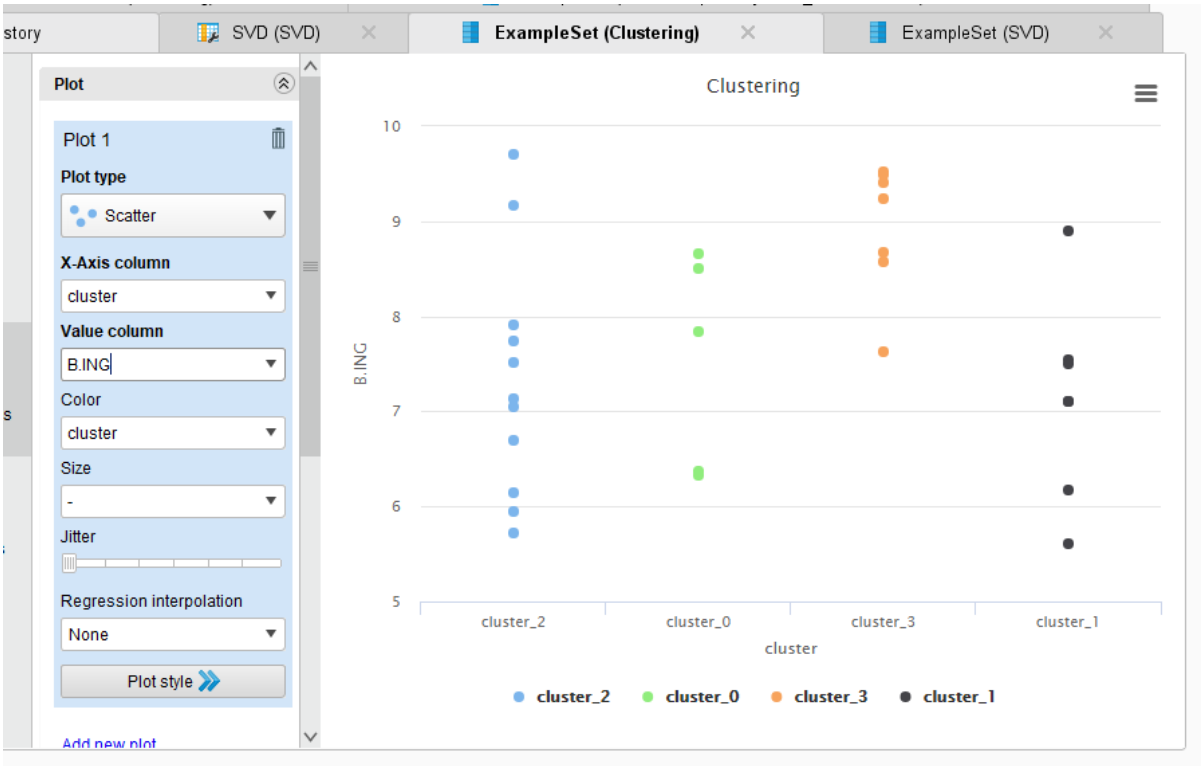


9. exampleSet K-means

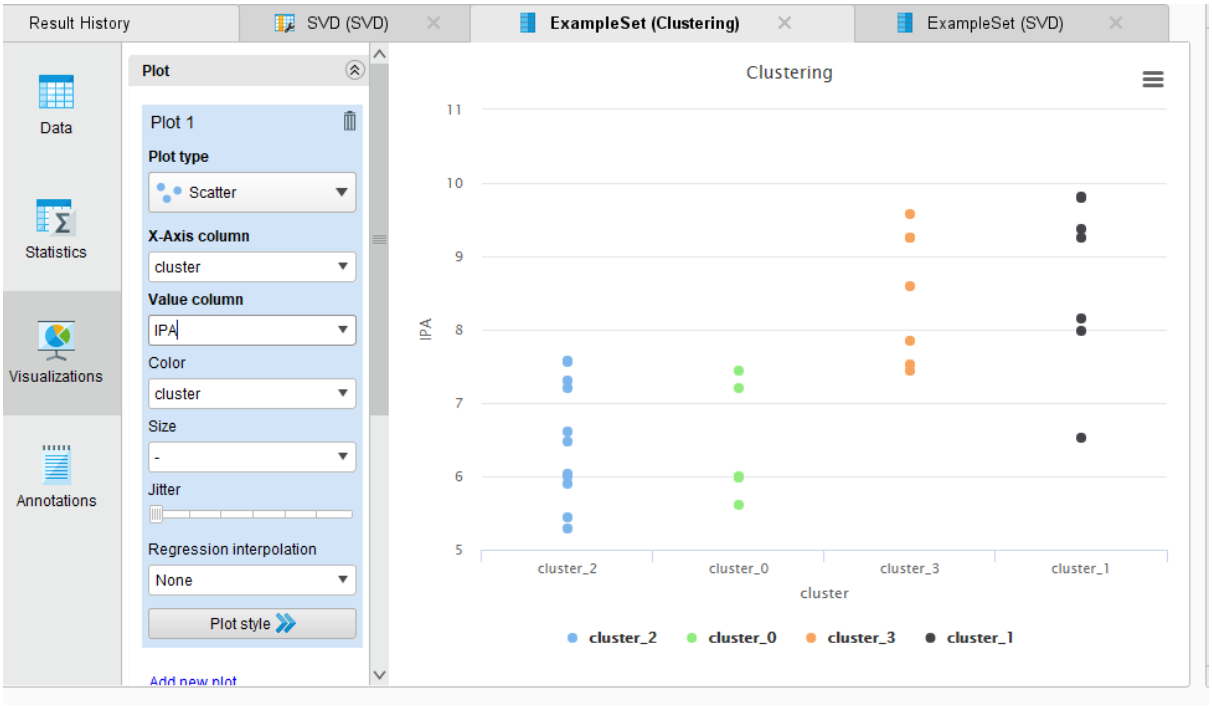
Kelompok siswa B.Indonesia



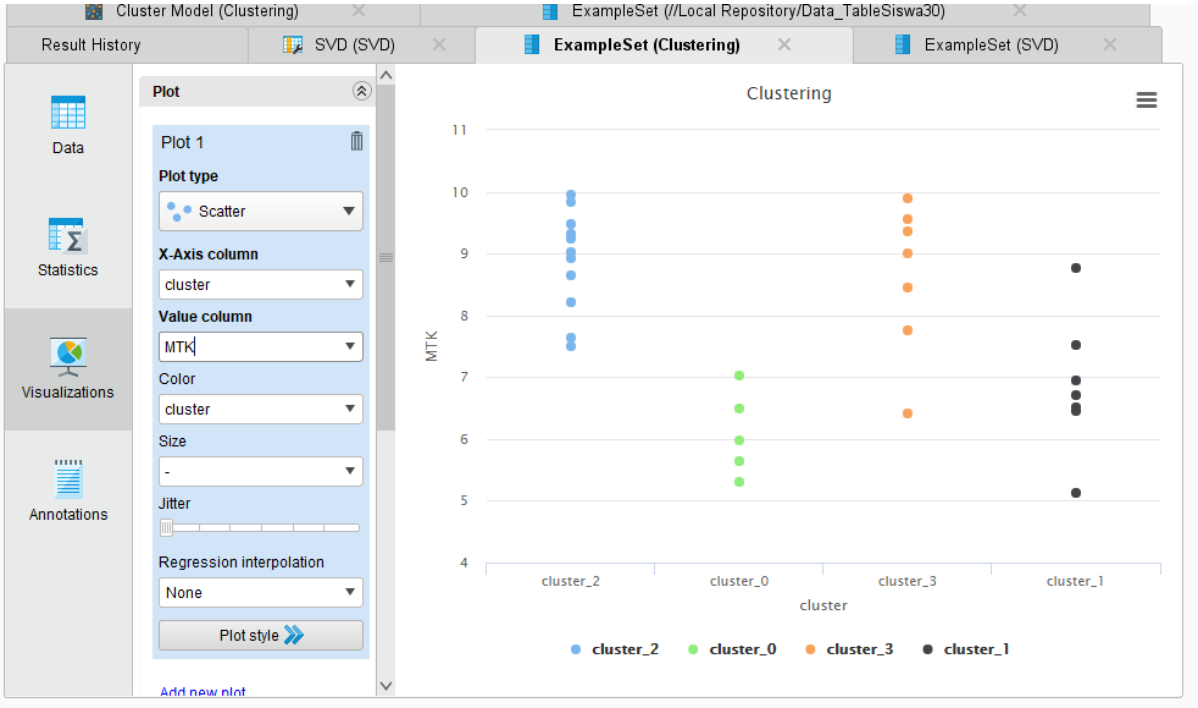
10. Kelompok siswa B.Inggris



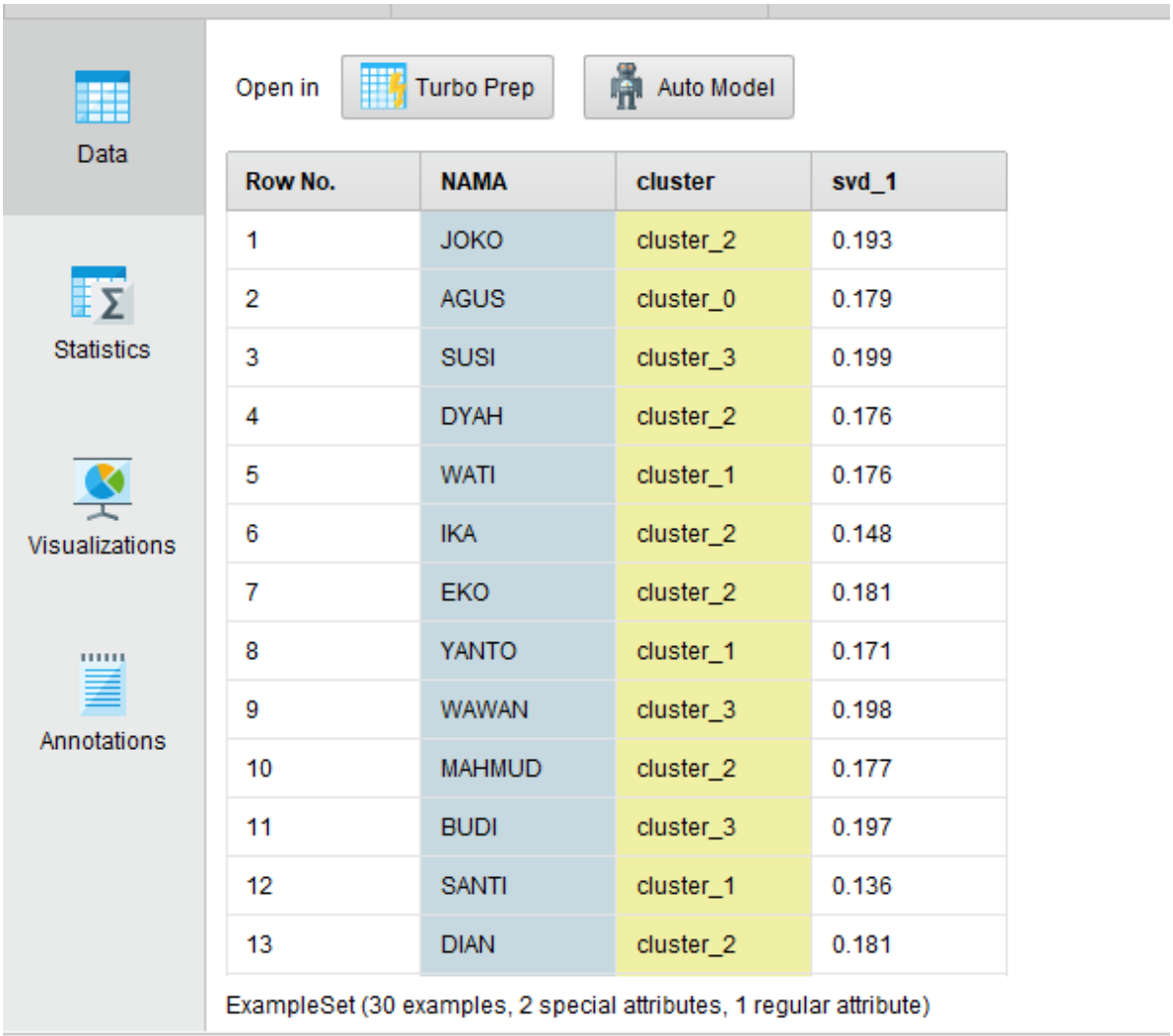
9. Kelompok siswa IPA



10. Kelompok siswa MTK

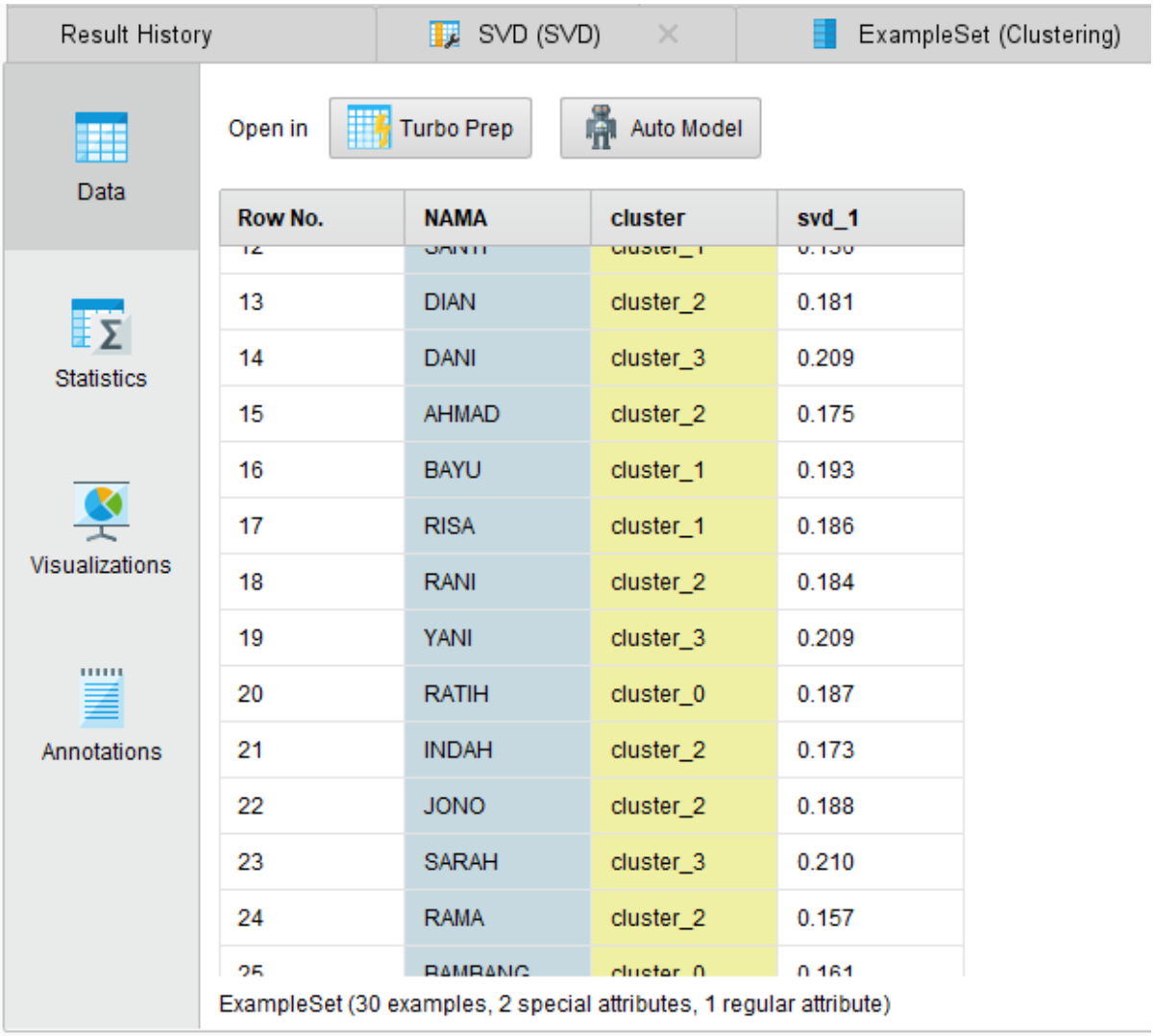


11. hasil ExampleSet (SVD)



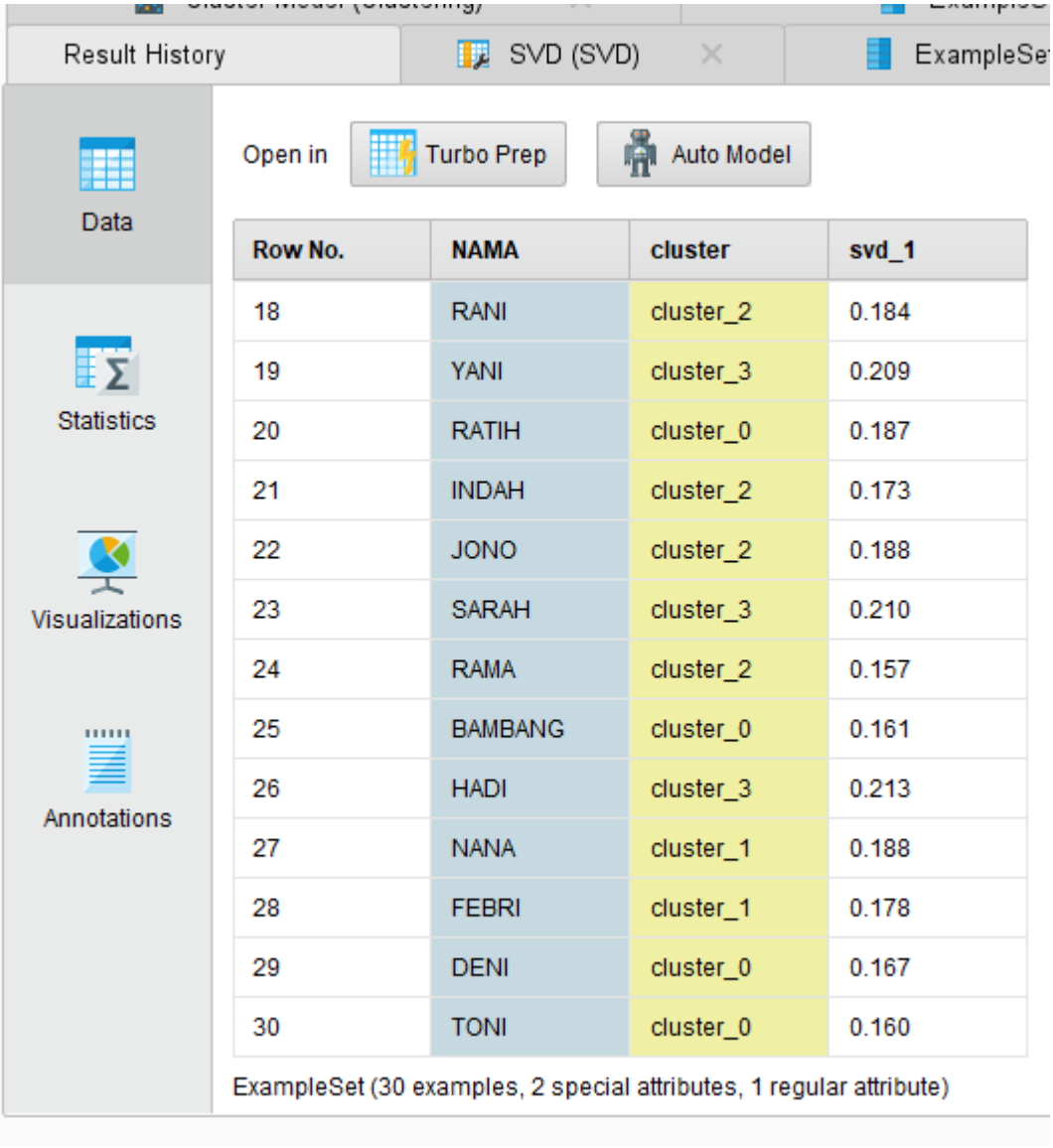
Row No.	NAMA	cluster	svd_1
1	JOKO	cluster_2	0.193
2	AGUS	cluster_0	0.179
3	SUSI	cluster_3	0.199
4	DYAH	cluster_2	0.176
5	WATI	cluster_1	0.176
6	IKA	cluster_2	0.148
7	EKO	cluster_2	0.181
8	YANTO	cluster_1	0.171
9	WAWAN	cluster_3	0.198
10	MAHMUD	cluster_2	0.177
11	BUDI	cluster_3	0.197
12	SANTI	cluster_1	0.136
13	DIAN	cluster_2	0.181

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



Row No.	NAMA	cluster	svd_1
12	SANTI	cluster_1	0.150
13	DIAN	cluster_2	0.181
14	DANI	cluster_3	0.209
15	AHMAD	cluster_2	0.175
16	BAYU	cluster_1	0.193
17	RISA	cluster_1	0.186
18	RANI	cluster_2	0.184
19	YANI	cluster_3	0.209
20	RATIH	cluster_0	0.187
21	INDAH	cluster_2	0.173
22	JONO	cluster_2	0.188
23	SARAH	cluster_3	0.210
24	RAMA	cluster_2	0.157
25	BAMBANG	cluster_0	0.161

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



Row No.	NAMA	cluster	svd_1
18	RANI	cluster_2	0.184
19	YANI	cluster_3	0.209
20	RATIH	cluster_0	0.187
21	INDAH	cluster_2	0.173
22	JONO	cluster_2	0.188
23	SARAH	cluster_3	0.210
24	RAMA	cluster_2	0.157
25	BAMBANG	cluster_0	0.161
26	HADI	cluster_3	0.213
27	NANA	cluster_1	0.188
28	FEBRI	cluster_1	0.178
29	DENI	cluster_0	0.167
30	TONI	cluster_0	0.160

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

12. Cluster Model(Clustering)