

Nama : Mochammad Itmamul Wafa

NIM : L200170184

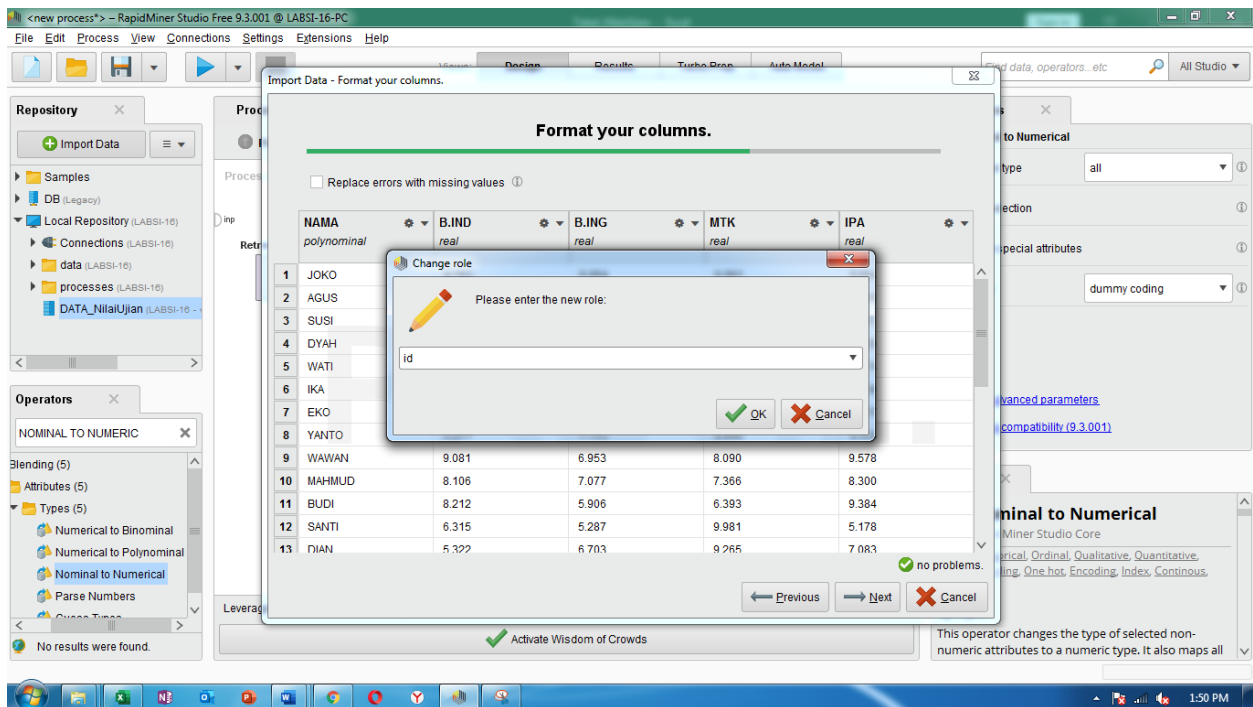
Kelas : F

Laporan tugas praktikum DWDM modul 10

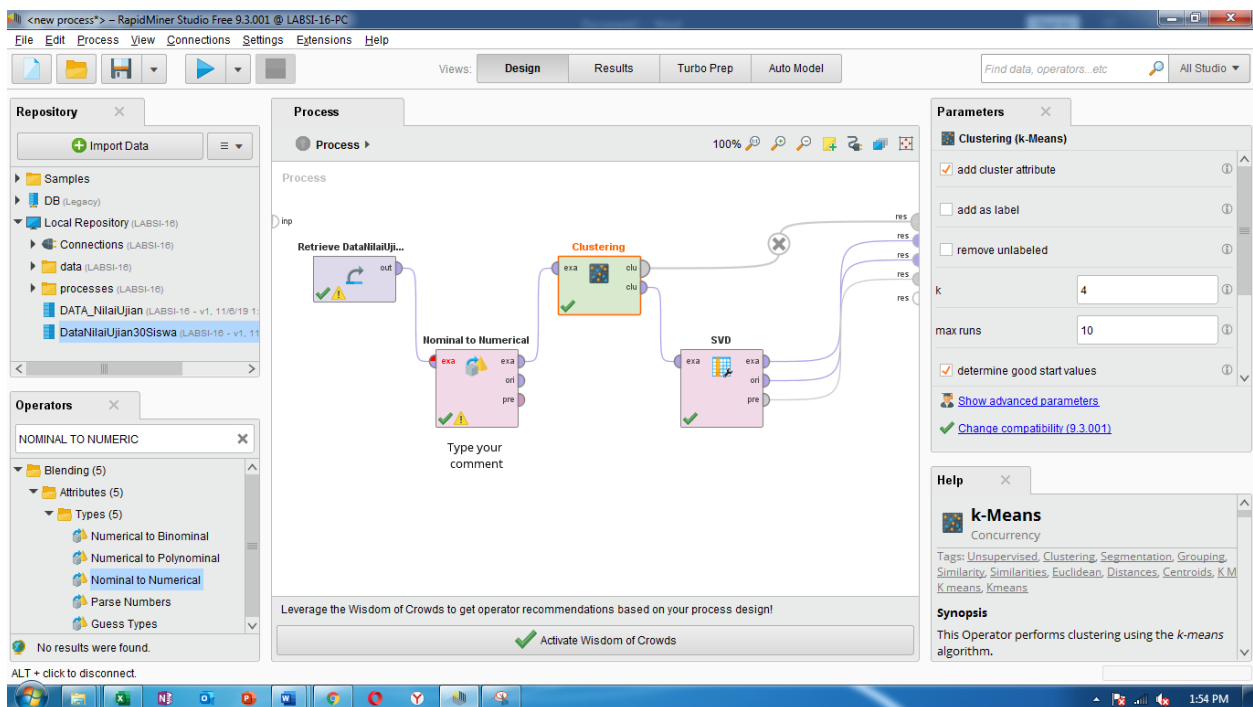
1. Data Nilai Ujian 30 siswa

	A	B	C	D	E	F
1	No_SISWA	NAMA	B.IND	B.ING	MTK	IPA
2	S-101	JOKO	9.7831361	6.0537	6.0608	8.8036
3	S-102	AGUS	7.8544101	9.1685	6.5338	8.4484
4	S-103	SUSI	6.7189883	8.432	7.4633	8.4608
5	S-104	DIYAH	5.8546659	5.0046	9.8041	7.6205
6	S-105	WATI	9.1033815	5.09	7.6355	8.5737
7	S-106	IKA	6.3713563	8.2443	7.2394	8.1395
8	S-107	EKO	9.4616725	8.162	5.4495	5.8569
9	S-108	YANTO	5.2766297	7.7535	8.8402	8.0537
10	S-109	WAWAN	9.0811413	6.9533	8.0901	9.5775
11	S-110	MAHMUD	8.1062984	7.0766	7.3662	8.3003
12	S-111	BUDI	8.2118035	5.906	6.3934	9.3839
13	S-112	SANTI	6.3150599	5.2873	9.9812	5.1777
14	S-113	DIAN	5.3222986	6.7032	9.2646	7.0832
15	S-114	DANI	8.310581	5.7158	5.1627	5.2871
16	S-115	AHMAD	7.6809138	6.1878	6.7141	7.9956
17	S-116	BAYU	5.7166853	9.6379	7.7319	6.5634
18	S-117	RISA	8.0829197	5.9834	9.2184	9.0038
19	S-118	RANI	7.4366308	6.6871	7.4634	8.001
20	S-119	YANI	9.393156	7.4265	6.4206	6.3943
21	S-120	RATIH	5.6103762	9.1785	7.7701	8.5189
22	S-121	INDAH	6.7975579	8.4333	9.8245	8.8383
23	S-122	JONO	9.1006578	6.2719	9.1409	8.2709
24	S-123	SARAH	7.2522646	6.4935	9.3768	9.1546
25	S-124	RAMA	8.5852368	7.7787	5.6178	7.7852
26	S-125	BAMBANG	9.1535593	7.2224	7.0145	7.5595
27	S-126	HADI	5.9226747	6.5411	7.4777	7.2569
28	S-127	NANA	6.7670971	7.1619	7.4573	7.6921
29	S-128	FEBRI	5.2499587	6.3821	7.2318	8.1545
30	S-129	DENI	9.863322	9.6554	9.6861	6.5187
31	S-130	TONI	7.6968657	6.9555	9.2278	7.5086
32						

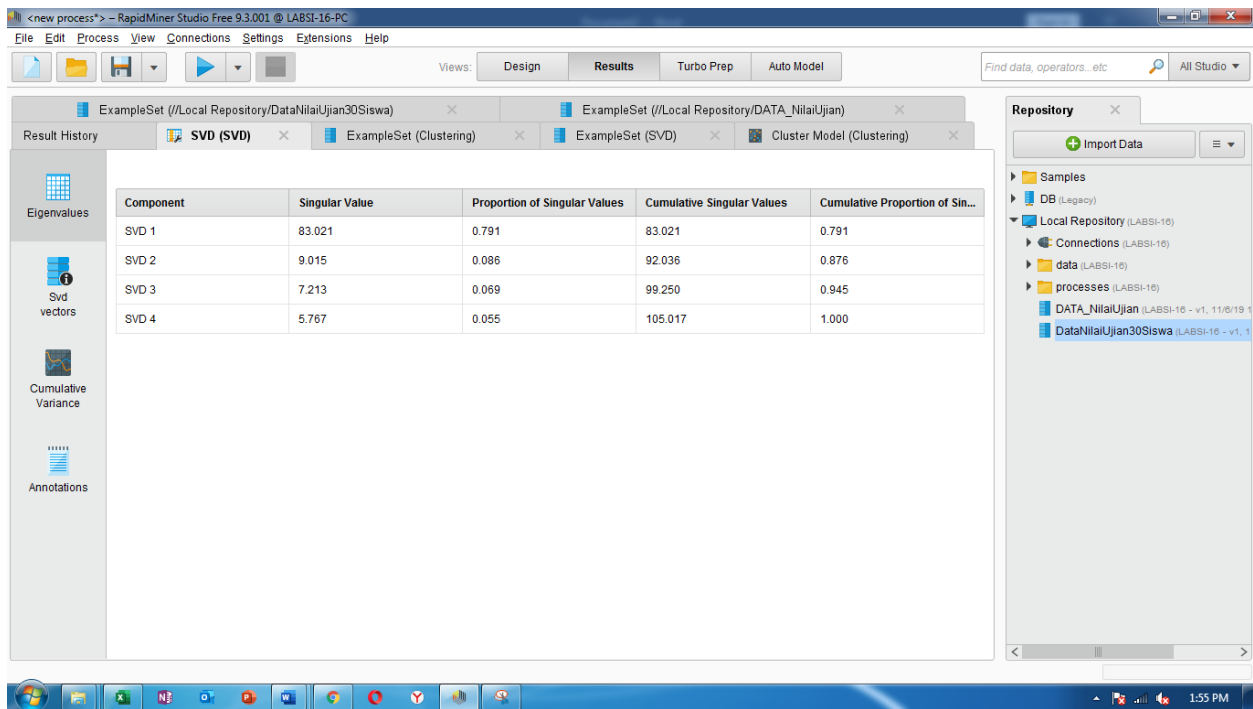
- Buka aplikasi rapid manner lalu masukan data yang tadi dan blok antaran kolom NAMA sampai kolom B.ING. selanjutnya ubaghlah role pada Nama. Kemudian save dengan nama DATA_NilaiUjian.



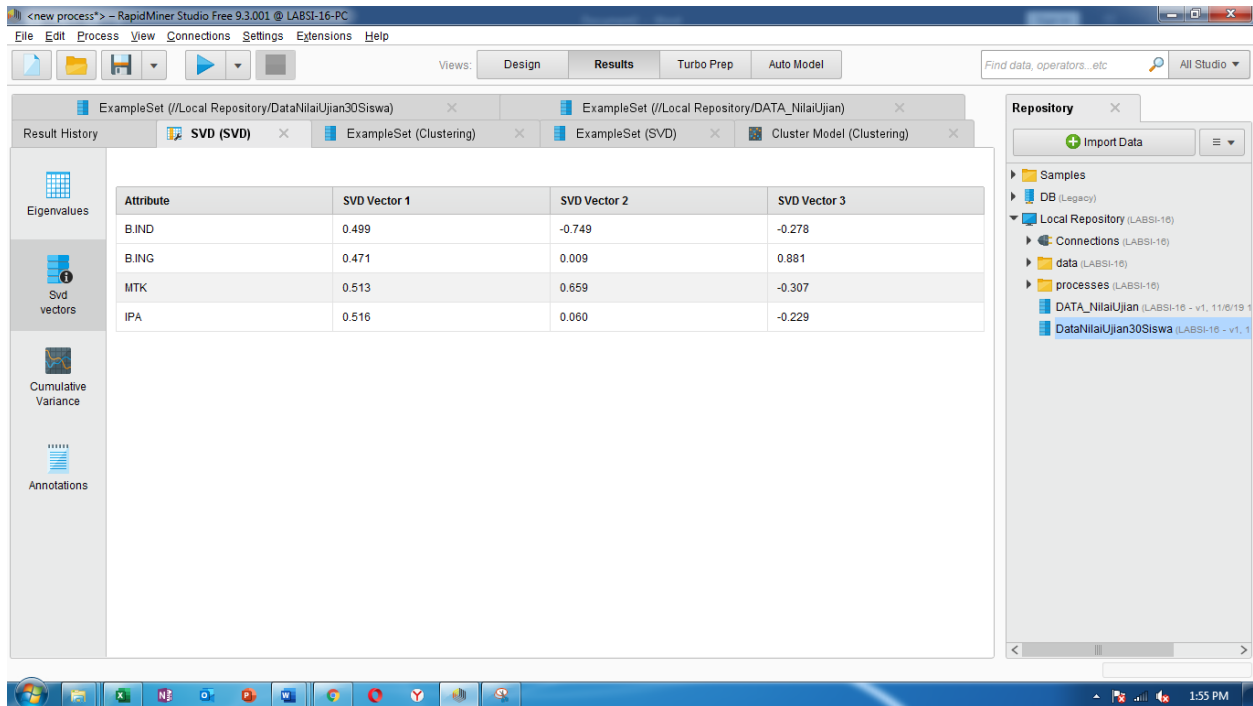
3. Tambahkan operator k-mens, SVD, sama Data_NilaiUjian jika error bias tambahkan operator nominal to numeric. Lalu ubahlah nilai K pada operator k-mens.



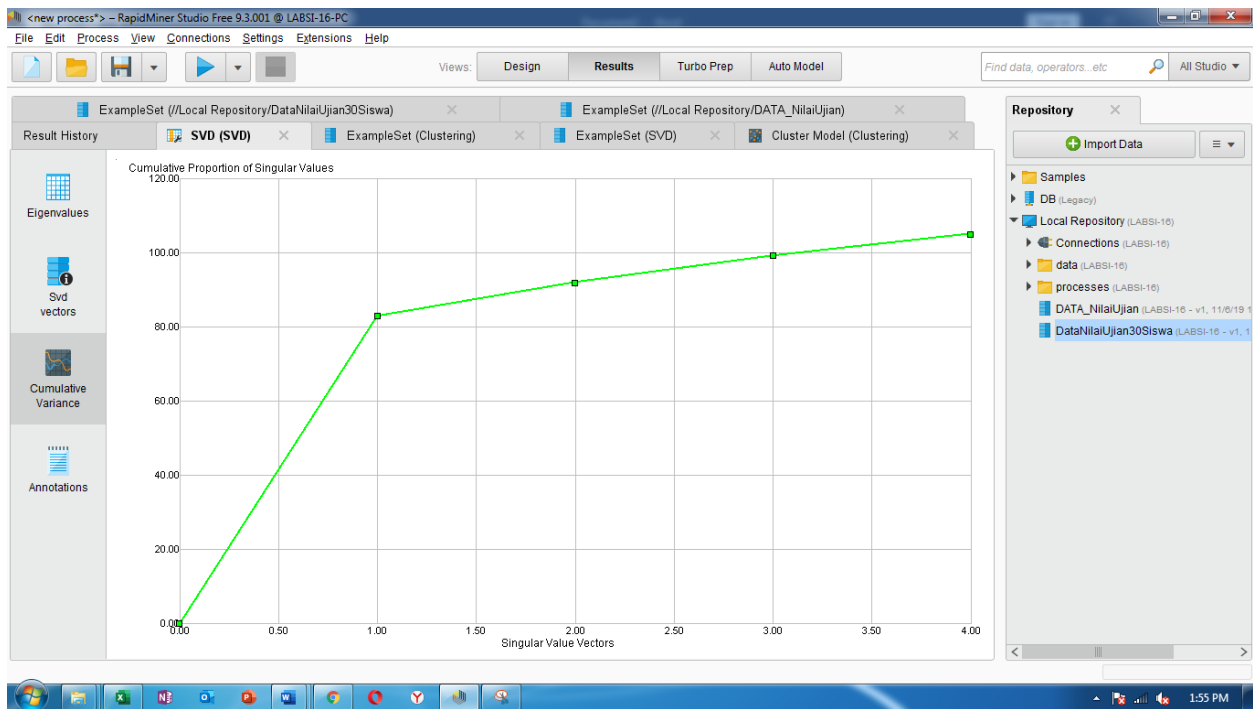
4. Hasil dari proses dengan algoritma K-Means
 - a. SVD
 - i. Nilai Eigenvalue



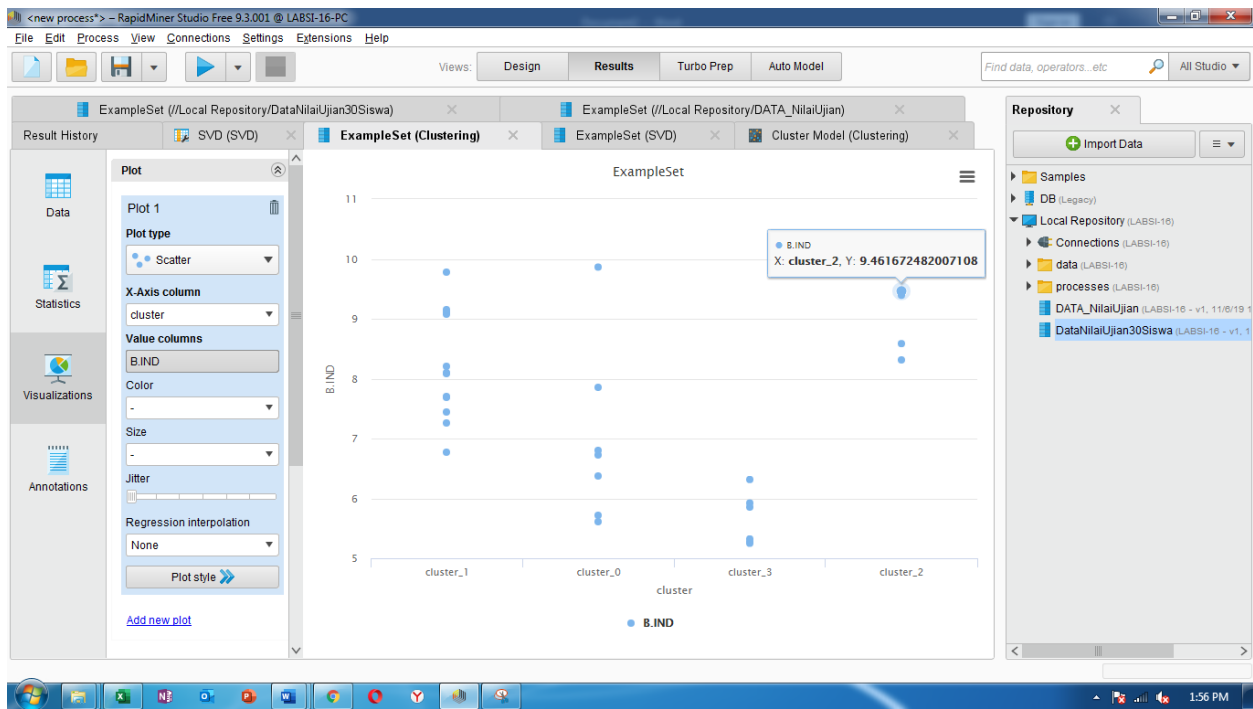
ii. Nilai svd vectors



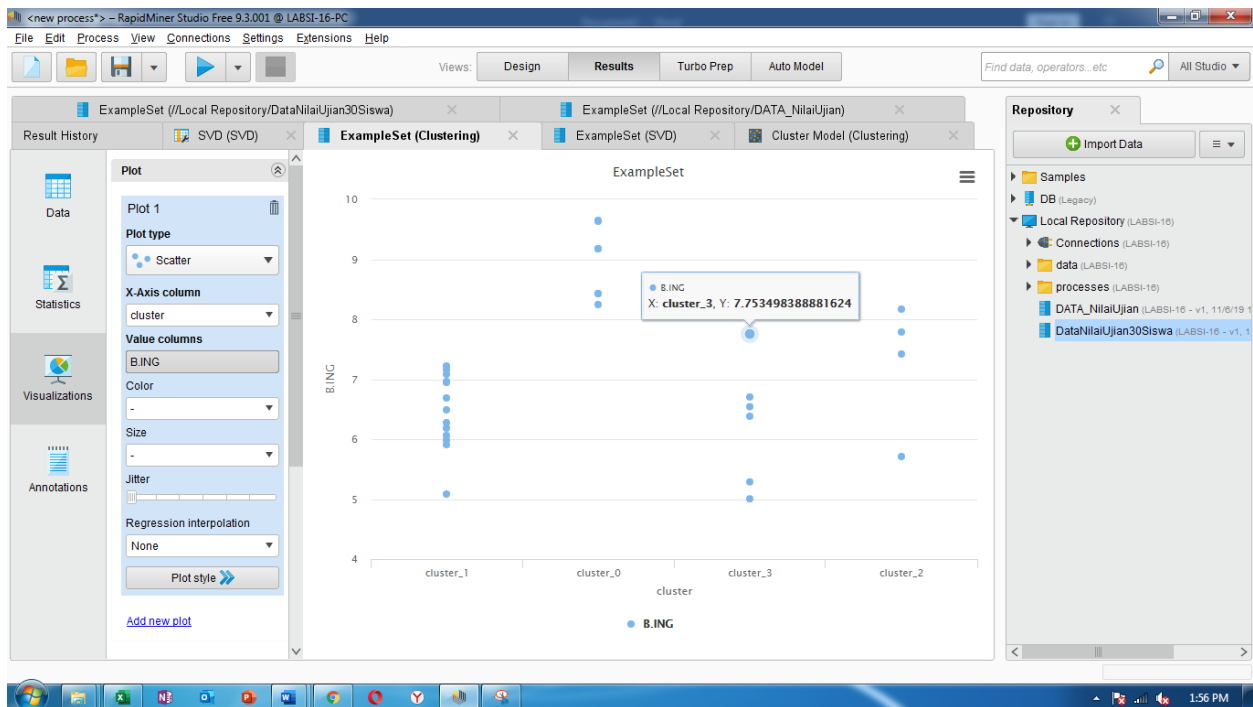
iii. Nilai cumulative variance



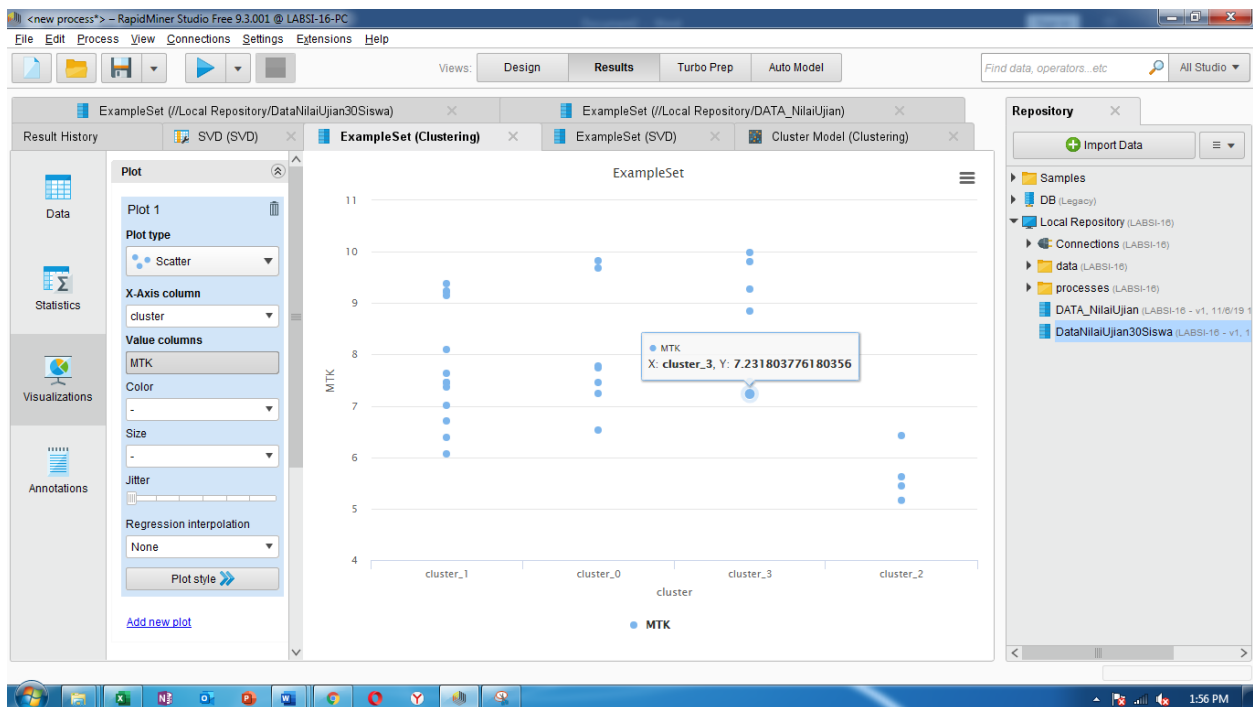
- b. ExampleSet (K-Means)
- i. Kelompok siswa bidang B.IND



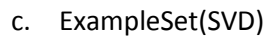
- ii. Kelompok siswa bidang B.ING



iii. Kelompok siswa bidang MTK



iv. Kelompok siswa bidang IPA



c. ExampleSet(SVD)

<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

Result History: SVD (SVD) ExampleSet (Clustering) ExampleSet (SVD) Cluster Model (Clustering)

Open in: Turbo Prep Auto Model

Filter (30 / 30 examples): all

Row No.	NAMA	cluster	svd_1
15	AHMAD	cluster_1	0.172
16	BAYU	cluster_0	0.178
17	RISA	cluster_1	0.195
18	RANI	cluster_1	0.178
19	YANI	cluster_2	0.178
20	RATIH	cluster_0	0.187
21	INDAH	cluster_0	0.204
22	JONO	cluster_1	0.198
23	SARAH	cluster_1	0.195
24	RAMA	cluster_2	0.179
25	BAMBANG	cluster_1	0.186
26	HADI	cluster_3	0.164
27	NANA	cluster_1	0.175
28	FEBRI	cluster_3	0.163

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

Repository: Import Data, Samples, DB (Legacy), Local Repository (LABSI-16), Connections (LABSI-16), data (LABSI-16), processes (LABSI-16), DATA_NilaiUjian (LABSI-16 - v1, 11/6/19), DataNilaiUjian30Siswa (LABSI-16 - v1, 11/6/19)

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<new process*> - RapidMiner Studio Free 9.3.001 @ LABSI-16-PC

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Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History: SVD (SVD) ExampleSet (Clustering) ExampleSet (SVD) Cluster Model (Clustering)

Open in: Turbo Prep Auto Model

Filter (30 / 30 examples): all

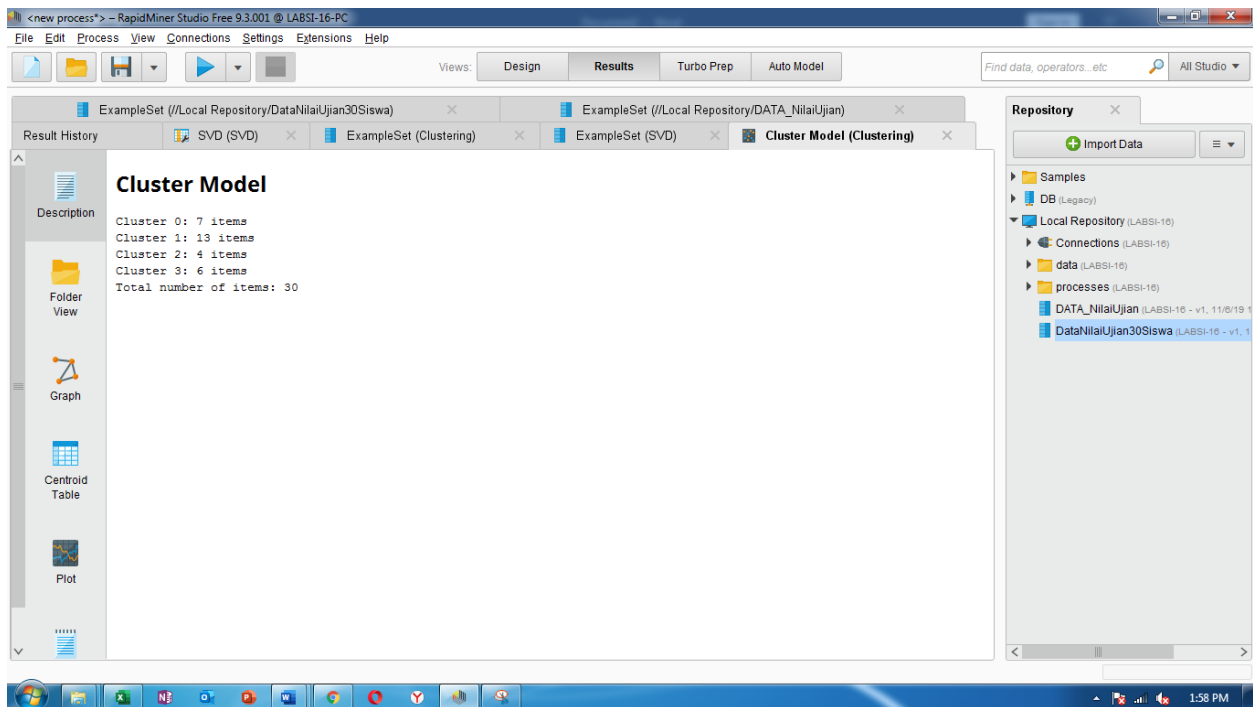
Row No.	NAMA	cluster	svd_1
17	RISA	cluster_1	0.195
18	RANI	cluster_1	0.178
19	YANI	cluster_2	0.178
20	RATIH	cluster_0	0.187
21	INDAH	cluster_0	0.204
22	JONO	cluster_1	0.198
23	SARAH	cluster_1	0.195
24	RAMA	cluster_2	0.179
25	BAMBANG	cluster_1	0.186
26	HADI	cluster_3	0.164
27	NANA	cluster_1	0.175
28	FEBRI	cluster_3	0.163
29	DENI	cluster_0	0.214
30	TONI	cluster_1	0.189

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

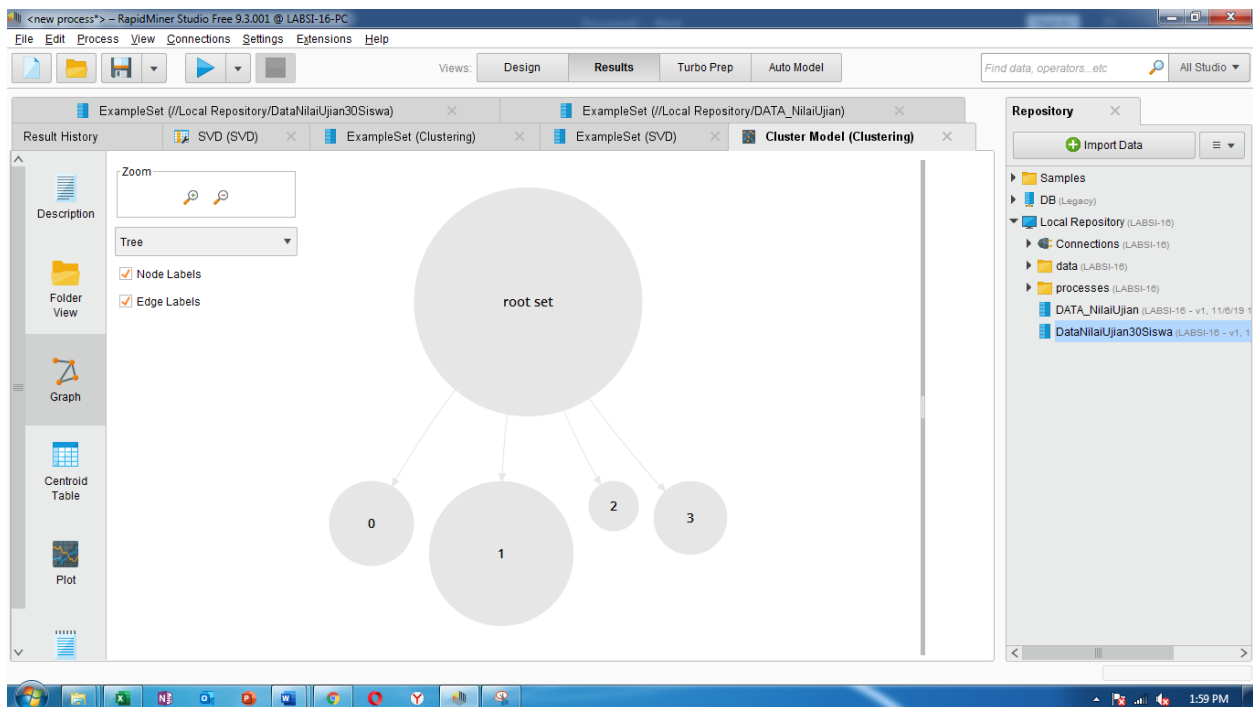
Repository: Import Data, Samples, DB (Legacy), Local Repository (LABSI-16), Connections (LABSI-16), data (LABSI-16), processes (LABSI-16), DATA_NilaiUjian (LABSI-16 - v1, 11/6/19), DataNilaiUjian30Siswa (LABSI-16 - v1, 11/6/19)

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- d. Cluster Model (clustering)
 - i. Description



ii. Graph



e. Interpretasi hasil algoritma K_Means

NO_SISWA	NAMA	CLUSTER	svd_1
2	AGUS	cluster_0	0.192081
3	SUSI	cluster_0	0.186906

6	IKA	cluster_0	0.180372
16	BAYU	cluster_0	0.17759
20	RATIH	cluster_0	0.18674
21	INDAH	cluster_0	0.204323
29	DENI	cluster_0	0.21439
1	JOKO	cluster_1	0.185282
5	WATI	cluster_1	0.184037
9	WAWAN	cluster_1	0.20352
10	MAHMUD	cluster_1	0.18595
11	BUDI	cluster_1	0.180669
15	AHMAD	cluster_1	0.172431
17	RISA	cluster_1	0.195428
18	RANI	cluster_1	0.17846
22	JONO	cluster_1	0.198141
23	SARAH	cluster_1	0.19525
25	BAMBANG	cluster_1	0.186325
27	NANA	cluster_1	0.175173
30	TONI	cluster_1	0.189387
7	EKO	cluster_2	0.173212
14	DANI	cluster_2	0.147108
19	YANI	cluster_2	0.17797
24	RAMA	cluster_2	0.178803
4	DYAH	cluster_3	0.171513
8	YANTO	cluster_3	0.180372
12	SANTI	cluster_3	0.161789
13	DIAN	cluster_3	0.171277
26	HADI	cluster_3	0.164001
28	FEBRI	cluster_3	0.16312