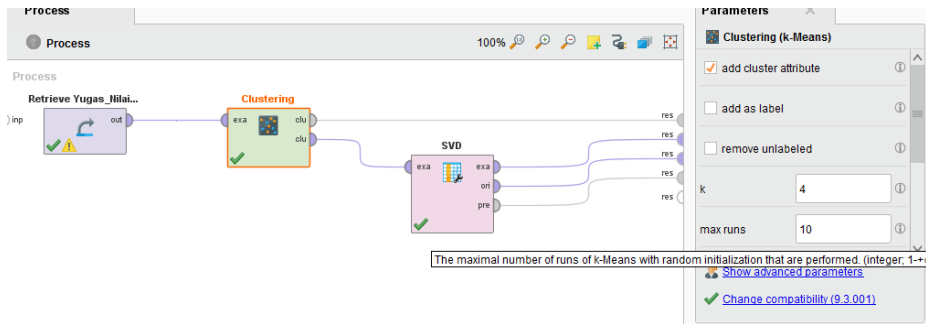


Nama : Hastyana R
NIM : L200170172
Kelas : G

1.Data

1	NO_SISWA	NAMA	B.IND	B.ING	MTK	IPA
2	S-101	JOKO	5.835391	5.671878	7.529023	8.664582
3	S-102	AGUS	9.32193	9.436546	8.226485	7.593593
4	S-103	SUSI	8.009641	7.232588	9.659329	8.543913
5	S-104	DYAH	5.286128	8.554984	7.451058	5.787207
6	S-105	WATI	9.872452	8.943629	6.998342	9.227459
7	S-106	IKA	6.604099	6.199996	8.780582	7.761146
8	S-107	EKO	6.172735	7.799196	9.528865	5.723589
9	S-108	YANTO	8.652611	5.803209	5.75379	7.444713
10	S-109	WAWAN	8.778385	7.602123	9.766705	5.686258
11	S-110	MAHMUD	5.778938	9.337523	5.273572	7.143213
12	S-111	BUDI	6.483306	6.449107	9.681974	5.567677
13	S-112	SANTI	9.371027	6.567927	7.848674	7.847451
14	S-113	DIAN	8.854802	8.345934	7.511972	9.468917
15	S-114	DANI	9.564825	6.039784	7.675852	5.315456
16	S-115	AHMAD	8.870686	6.415386	6.010931	7.598227
17	S-116	BAYU	8.107716	5.11412	8.948885	6.496381
18	S-117	RISA	5.740813	9.089696	6.895052	9.755847
19	S-118	RANI	7.815758	8.073759	9.714029	7.769006
20	S-119	YANI	7.29148	9.902645	7.415314	8.464014
21	S-120	RATIH	6.048149	8.954306	8.323678	9.770489
22	S-121	INDAH	7.436725	5.74496	6.969533	9.868467

23	S-122	JONO	5.7858	7.276792	7.25655	8.744322
24	S-123	SARAH	6.894448	7.660121	7.070086	5.590045
25	S-124	RAMA	8.813893	5.92835	5.081136	6.298861
26	S-125	BAMBANG	6.659447	7.590977	6.36692	7.208638
27	S-126	HADI	7.464249	9.477542	9.000264	5.773222
28	S-127	NANA	5.200234	7.976367	5.36226	7.569256
29	S-128	FEBRI	9.739198	9.024555	5.218474	5.928094
30	S-129	DENI	9.586404	9.326866	9.799236	8.962327
31	S-130	TONI	9.978478	9.465403	7.808454	7.861752



2. Kegiatan seperti latihan

1. SVD

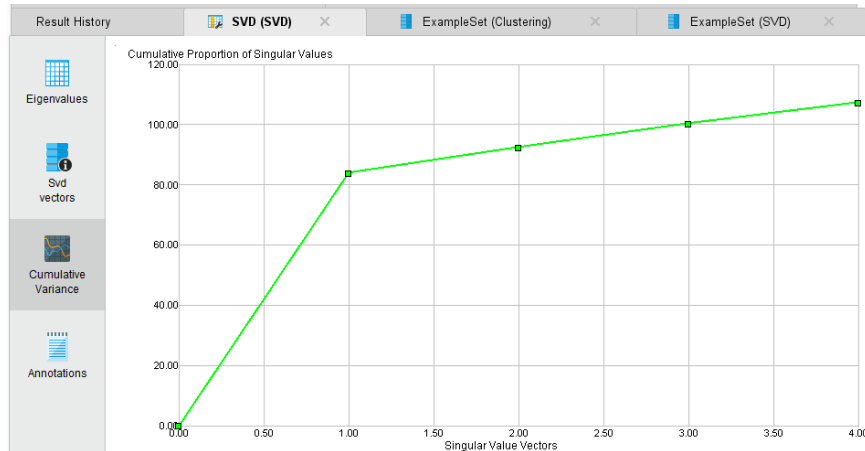
a. Nilai eigenvalue

Component	Singular Value	Proportion of Singular V...	Cumulative Singular Val...	Cumulative Proportion o...
SVD 1	83.974	0.782	83.974	0.782
SVD 2	8.480	0.079	92.454	0.861
SVD 3	7.931	0.074	100.385	0.935
SVD 4	7.007	0.065	107.392	1.000

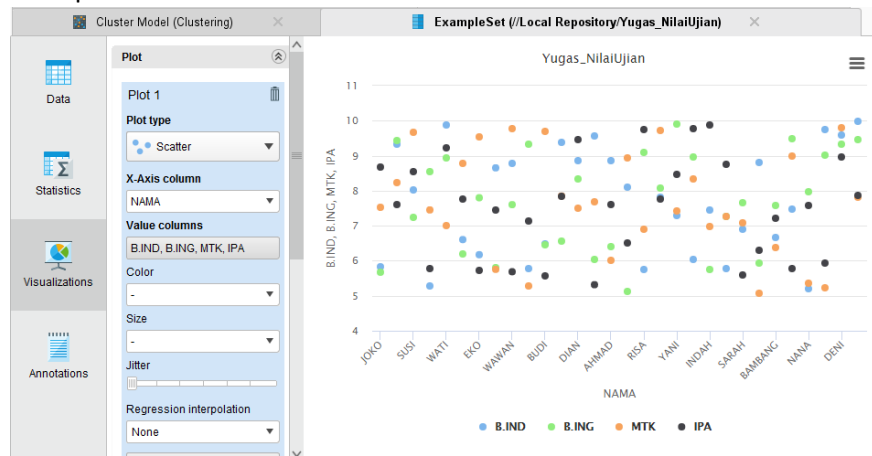
b. Nilai SVD vector

Attribute	SVD Vector 1	SVD Vector 2	SVD Vector 3
B.IND	0.503	-0.620	0.602
B.ING	0.505	0.398	0.009
MTK	0.500	-0.349	-0.780
IPA	0.492	0.580	0.169

c. Nilai Cumulative variance



2. Example Set k-Means



3. Example set svd

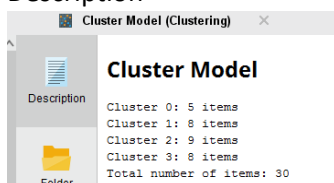
Row No.	NAMA	cluster ↑	svd_1
8	YANTO	cluster_0	0.165
14	DANI	cluster_0	0.170
15	AHMAD	cluster_0	0.172
24	RAMA	cluster_0	0.156
28	FEBRI	cluster_0	0.178
4	DYAH	cluster_1	0.161
6	IKA	cluster_1	0.175
7	EKO	cluster_1	0.174
9	WAWAN	cluster_1	0.190
11	BUDI	cluster_1	0.168
16	BAYU	cluster_1	0.171

Row No.	NAMA	cluster ↑	svd_1
23	SARAH	cluster_1	0.162
26	HADI	cluster_1	0.189
1	JOKO	cluster_2	0.165
10	MAHMUD	cluster_2	0.164
17	RISA	cluster_2	0.187
19	YANI	cluster_2	0.197
20	RATIH	cluster_2	0.197
21	INDAH	cluster_2	0.178
22	JONO	cluster_2	0.173
25	BAMBANG	cluster_2	0.166
27	NANA	cluster_2	0.155

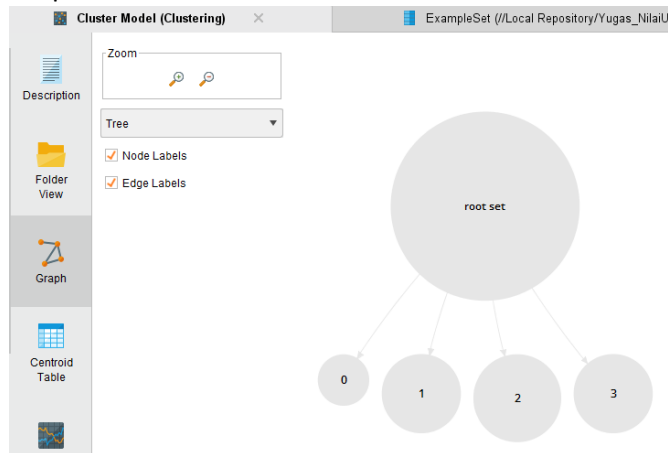
Row No.	NAMA	cluster ↑	svd_1
2	AGUS	cluster_3	0.206
3	SUSI	cluster_3	0.199
5	WATI	cluster_3	0.209
12	SANTI	cluster_3	0.188
13	DIAN	cluster_3	0.203
18	RANI	cluster_3	0.199
29	DENI	cluster_3	0.224
30	TONI	cluster_3	0.209

4. Cluster Model

a. Description



b. Graph



3. nama siswa di cluster 0, 1, 2, 3

Row No.	NAMA	cluster ↑	B.IKD	B.JKG	MTK	IPA
8	YANTO	cluster_0	8.653	5.803	5.754	7.445
14	DANI	cluster_0	9.565	6.040	7.676	5.315
15	AHMAD	cluster_0	8.871	6.415	6.011	7.598
24	RAMA	cluster_0	8.814	5.928	5.081	6.299
28	FEBRI	cluster_0	9.739	9.025	5.218	5.928
4	DIYAH	cluster_1	5.286	8.555	7.451	5.787
6	IKA	cluster_1	6.604	6.200	8.781	7.761
7	EKO	cluster_1	6.173	7.799	9.529	5.724
9	WAWAN	cluster_1	8.778	7.602	9.767	5.686
11	BUDI	cluster_1	6.483	6.449	9.682	5.568
16	BAYU	cluster_1	8.108	5.114	8.949	6.496

23	SARAH	cluster_1	6.894	7.660	7.070	5.590
26	HADI	cluster_1	7.464	9.478	9.000	5.773
1	JOKO	cluster_2	5.835	5.672	7.529	8.665
10	MAHMUD	cluster_2	5.779	9.338	5.274	7.143
17	RISA	cluster_2	5.741	9.090	6.895	9.756
19	YANI	cluster_2	7.291	9.903	7.415	8.464
20	RATIH	cluster_2	6.048	8.954	8.324	9.770
21	INDAH	cluster_2	7.437	5.745	6.970	9.868
22	JONO	cluster_2	5.786	7.277	7.257	8.744
25	BAMBANG	cluster_2	6.659	7.591	6.367	7.209
27	NANA	cluster_2	5.200	7.976	5.362	7.569

2	AGUS	cluster_3	9.322	9.437	8.226	7.594
3	SUSI	cluster_3	8.010	7.233	9.659	8.544
5	WATI	cluster_3	9.872	8.944	6.998	9.227
12	SANTI	cluster_3	9.371	6.668	7.849	7.847
13	DIAN	cluster_3	8.855	8.346	7.512	9.469
18	RANI	cluster_3	7.816	8.074	9.714	7.769
29	DENI	cluster_3	9.586	9.327	9.799	8.962
30	TONI	cluster_3	9.978	9.465	7.808	7.862