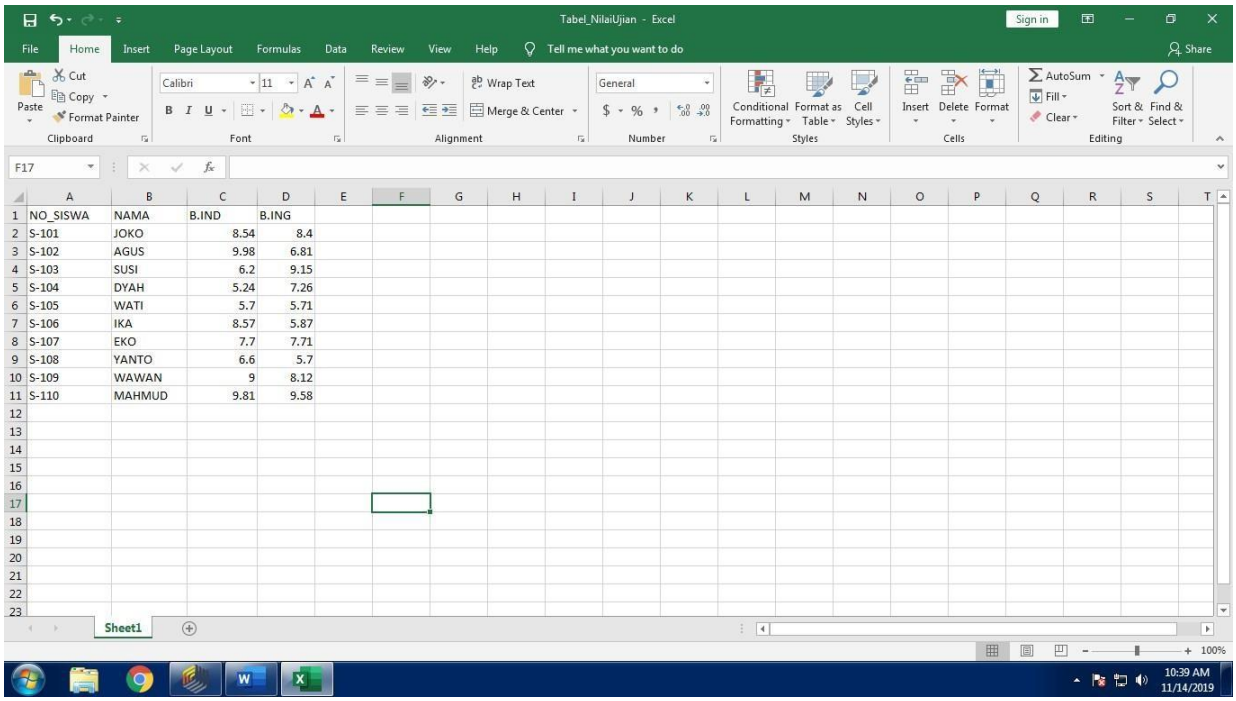
Nama : Aji Prastyo
Nim : L200170082

MODUL 10

KEGIATAN PRAKTIKUM

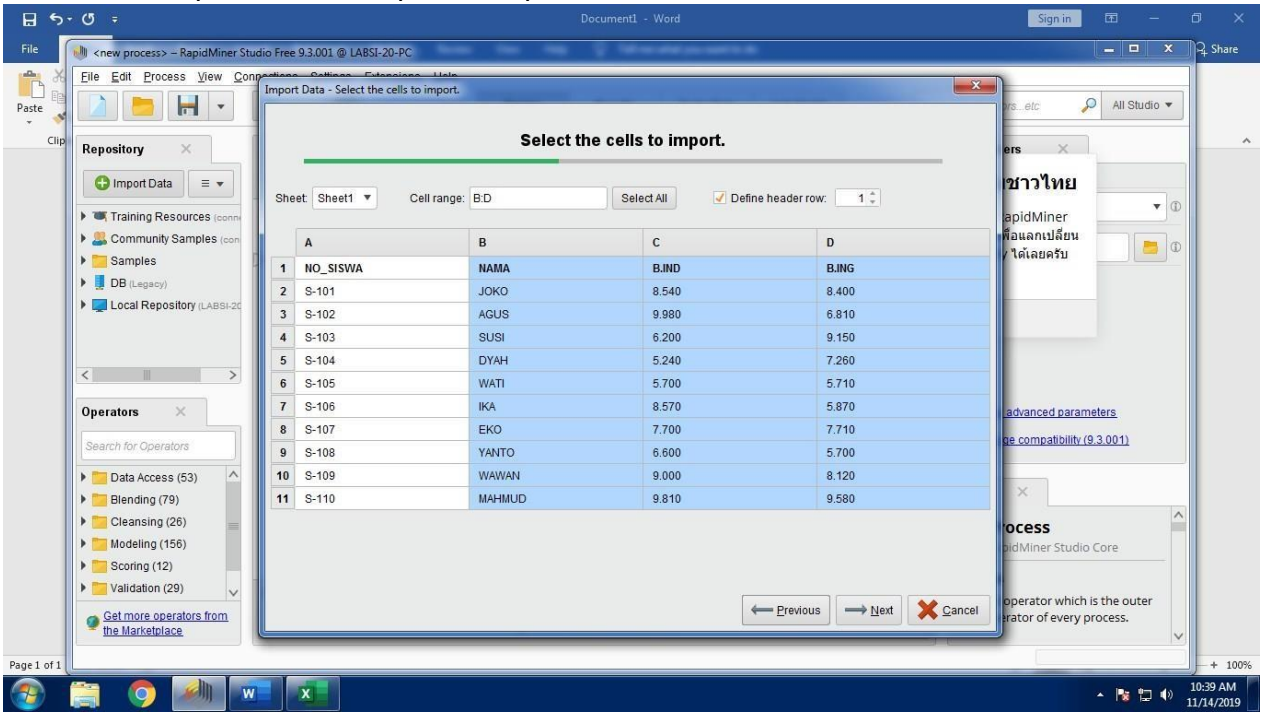
- Berikut table data nilai siswa :



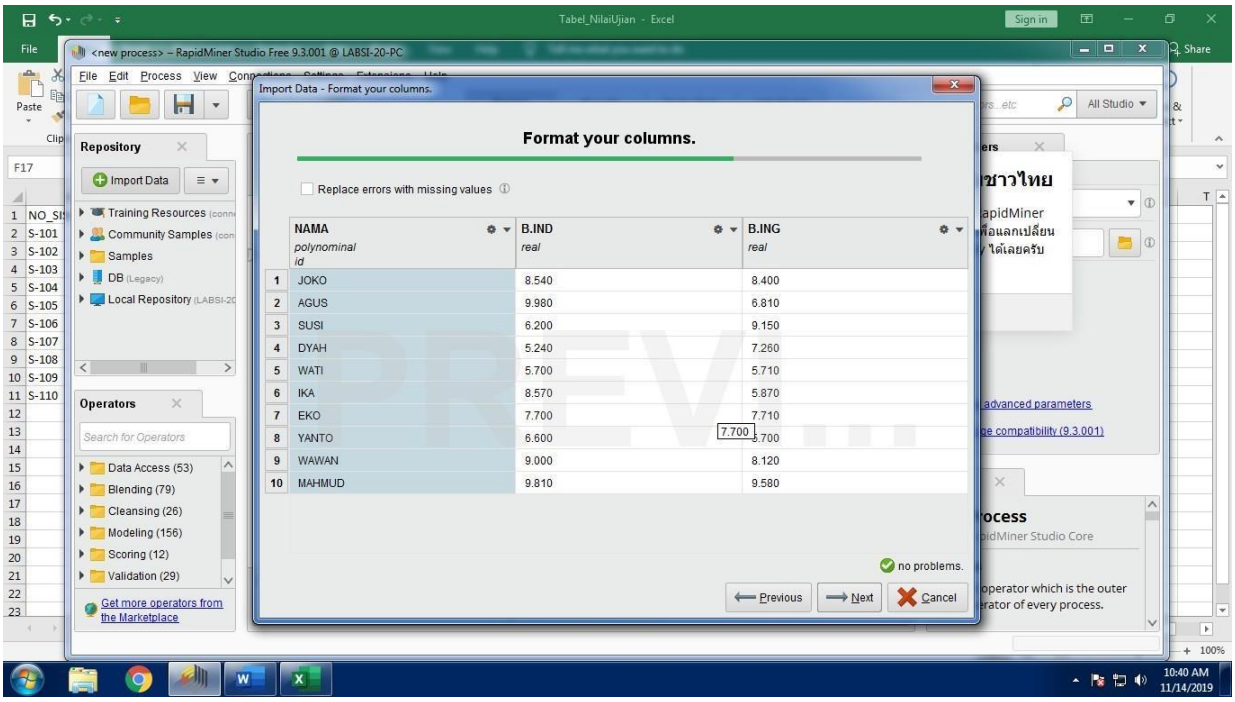
	A	B	C	D
1	NO_SISWA	NAMA	B.IND	B.ING
2	S-101	JOKO	8.54	8.4
3	S-102	AGUS	9.98	6.81
4	S-103	SUSI	6.2	9.15
5	S-104	DYAH	5.24	7.26
6	S-105	WATI	5.7	5.71
7	S-106	IKA	8.57	5.87
8	S-107	EKO	7.7	7.71
9	S-108	YANTO	6.6	5.7
10	S-109	WAWAN	9	8.12
11	S-110	MAHMUD	9.81	9.58

-

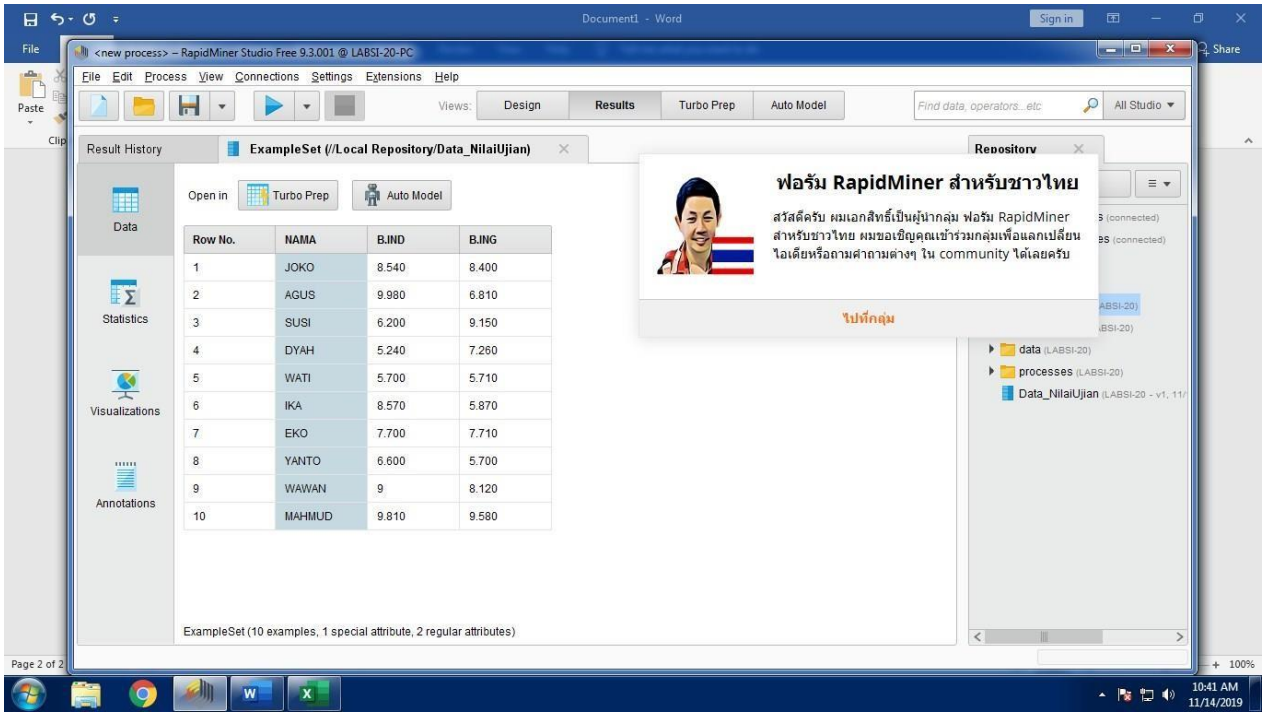
Gunakan file Tabel_NilaiUjian.xlxs sebagai data yang akan digunakan dalam proses Clustering. Lalu import ke dalam aplikasi RapidMiner.



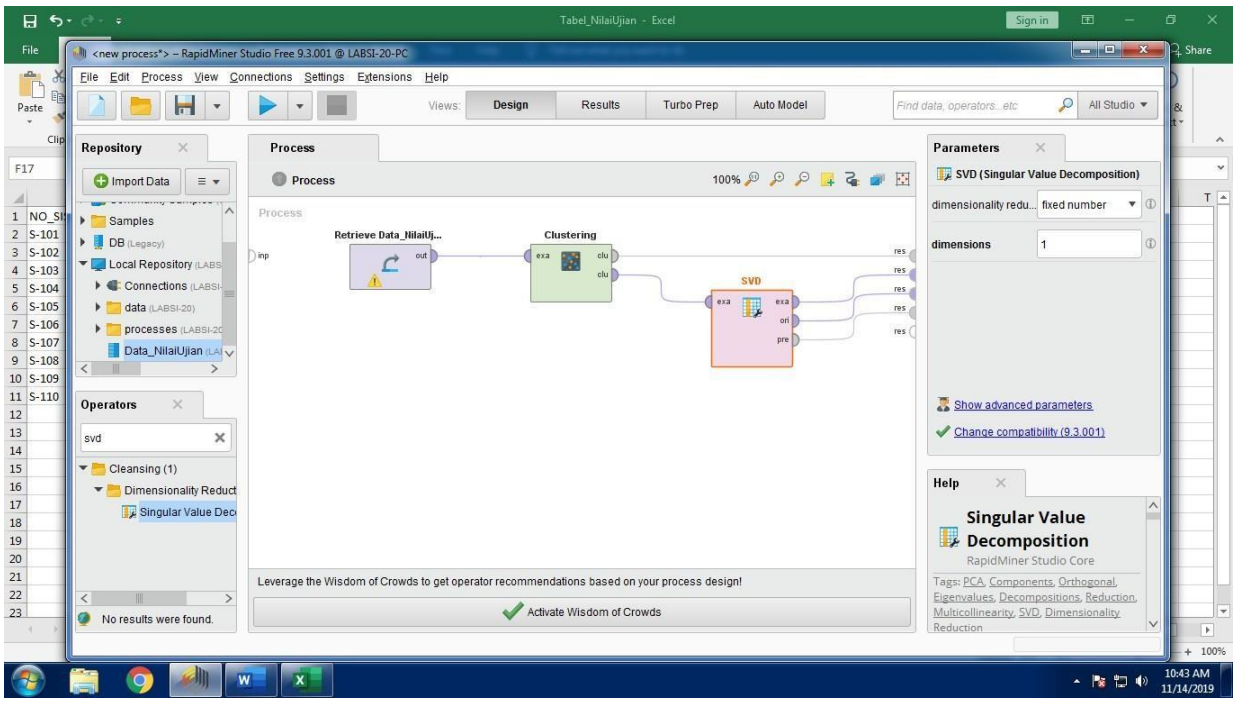
	A	B	C	D
1	NO_SISWA	NAMA	B.IND	B.ING
2	S-101	JOKO	8.540	8.400
3	S-102	AGUS	9.980	6.810
4	S-103	SUSI	6.200	9.150
5	S-104	DYAH	5.240	7.260
6	S-105	WATI	5.700	5.710
7	S-106	IKA	8.570	5.870
8	S-107	EKO	7.700	7.710
9	S-108	YANTO	6.600	5.700
10	S-109	WAWAN	9.000	8.120
11	S-110	MAHMUD	9.810	9.580



	NAMA *polynominal* *id*	B.IND *real*	B.ING *real*
1	JOKO	8.540	8.400
2	AGUS	9.980	6.810
3	SUSI	6.200	9.150
4	DYAH	5.240	7.260
5	WATI	5.700	5.710
6	IKA	8.570	5.870
7	EKO	7.700	7.710
8	YANTO	6.600	5.700
9	WAWAN	9.000	8.120
10	MAHMUD	9.810	9.580

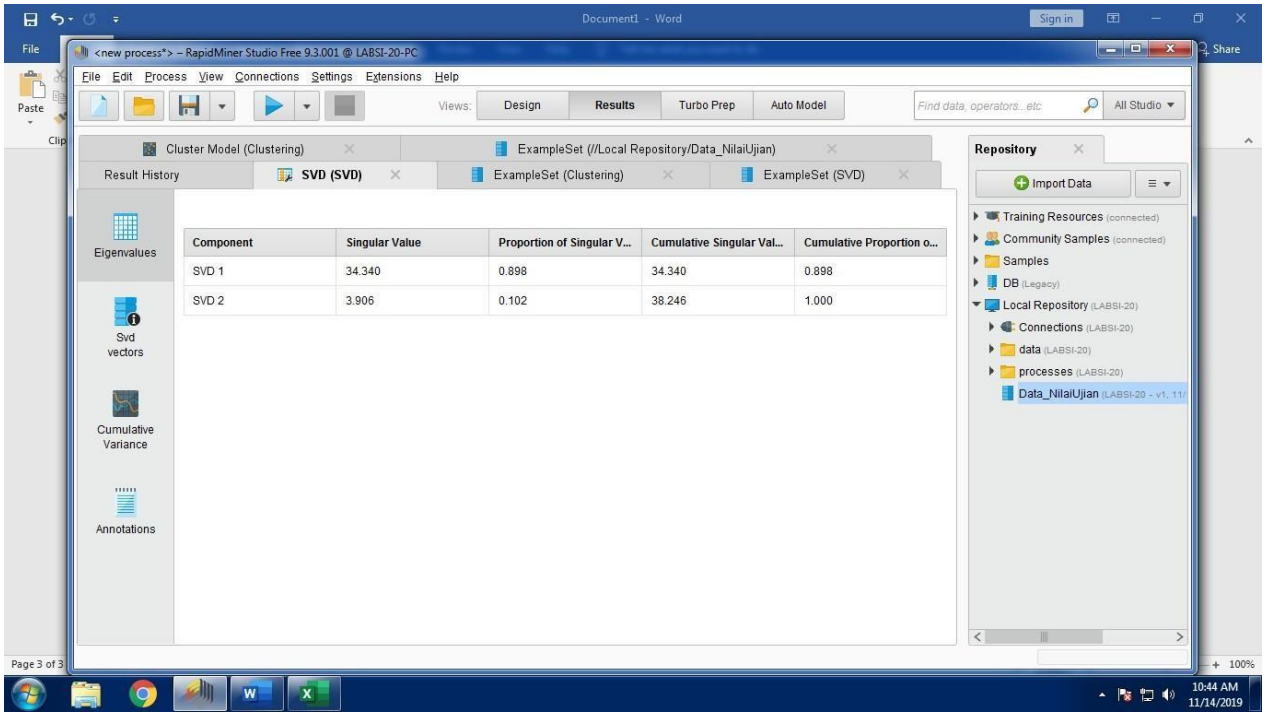


- Tambahkan operator k-Means. Lalu Jalankan dengan menekan tombol run (F11)

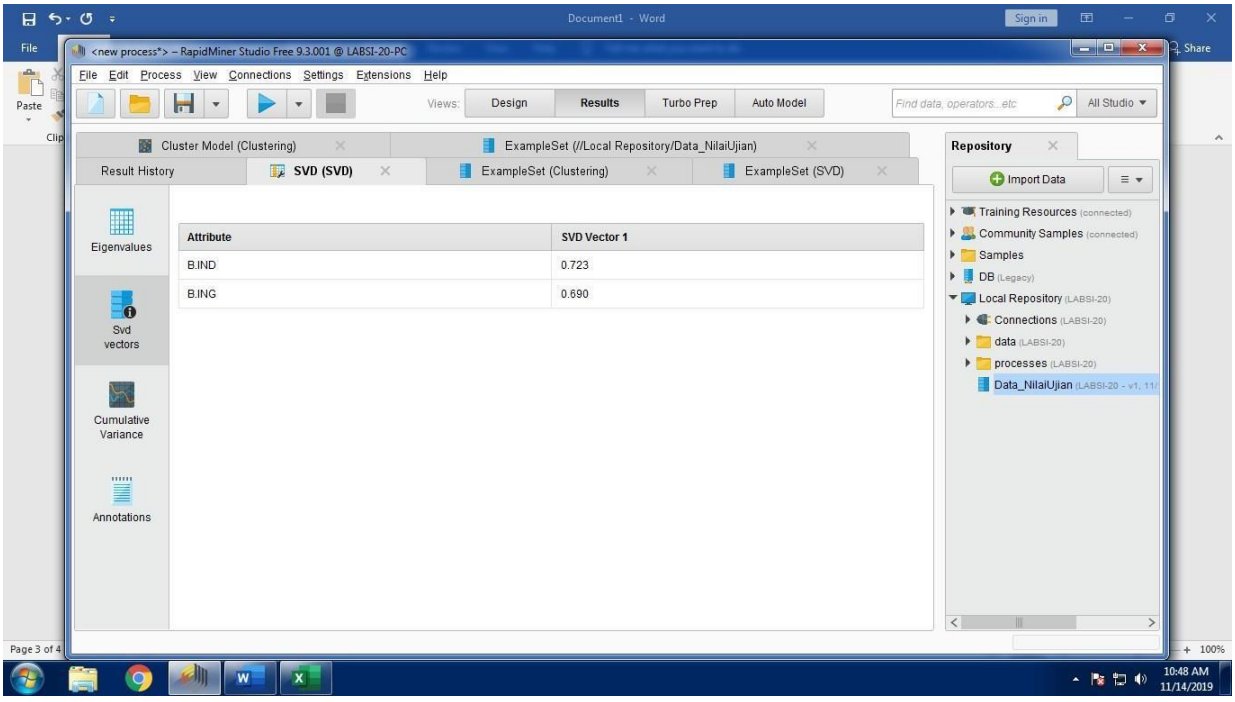


-

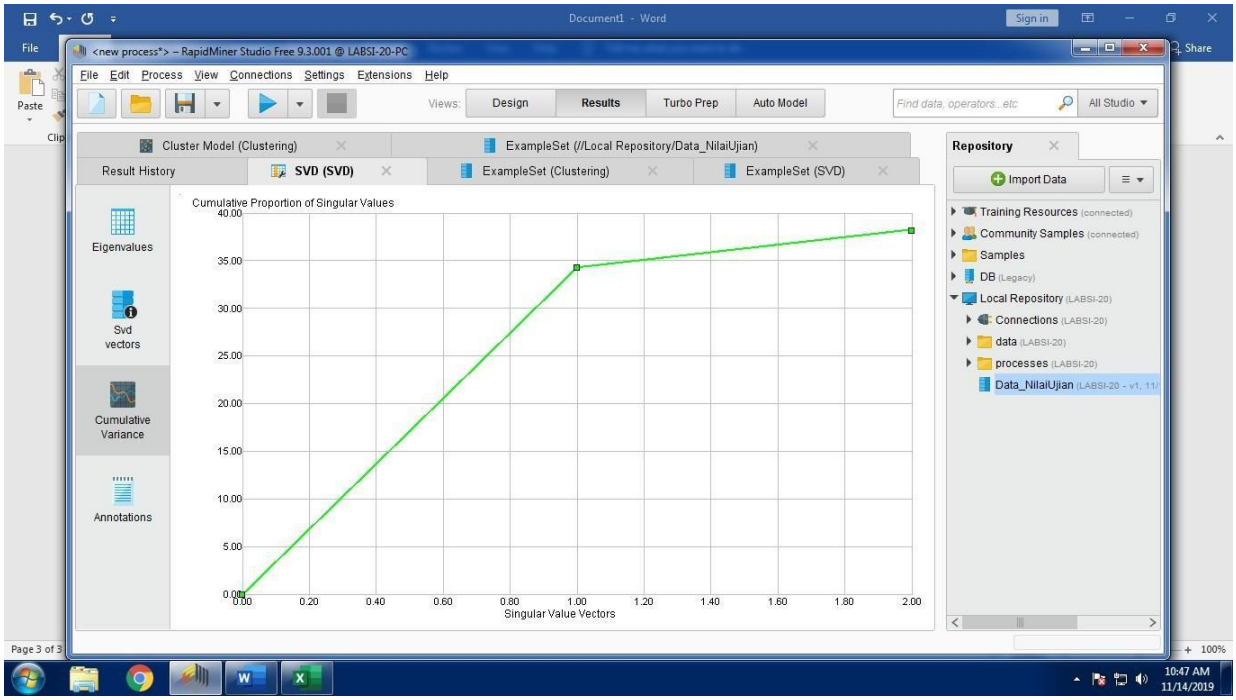
Nilai Eingenvalue



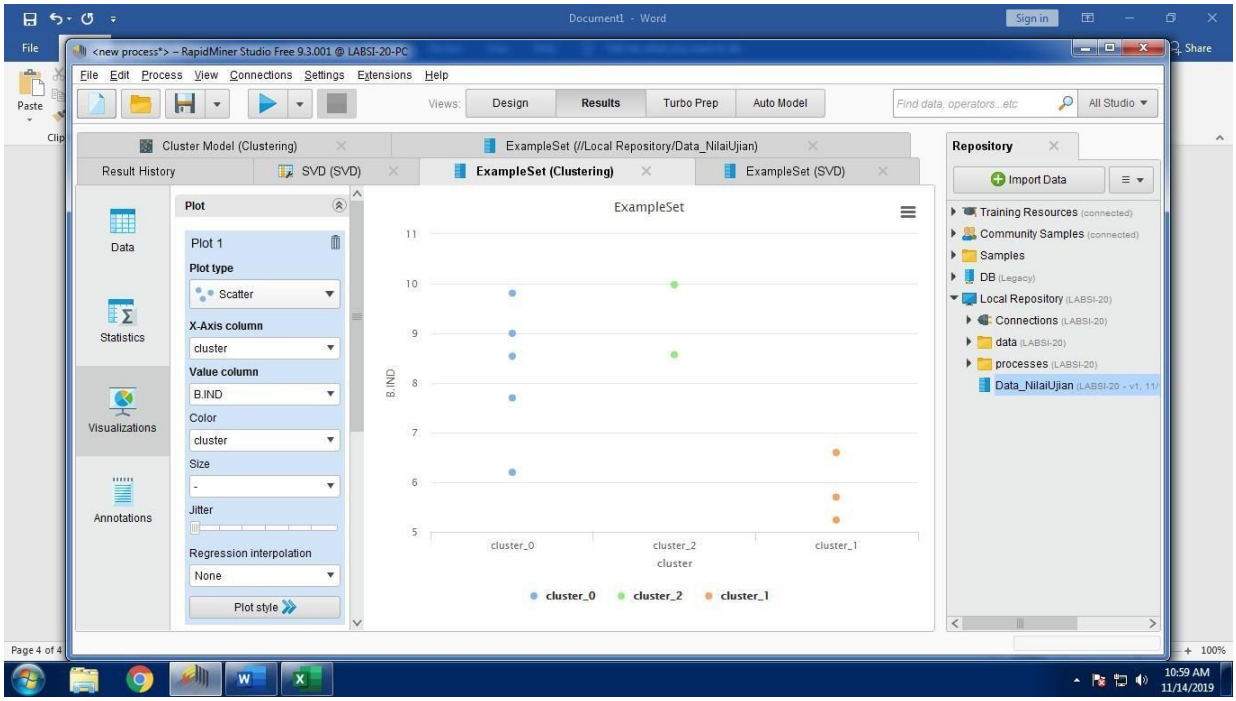
- Nilai Svd vectors



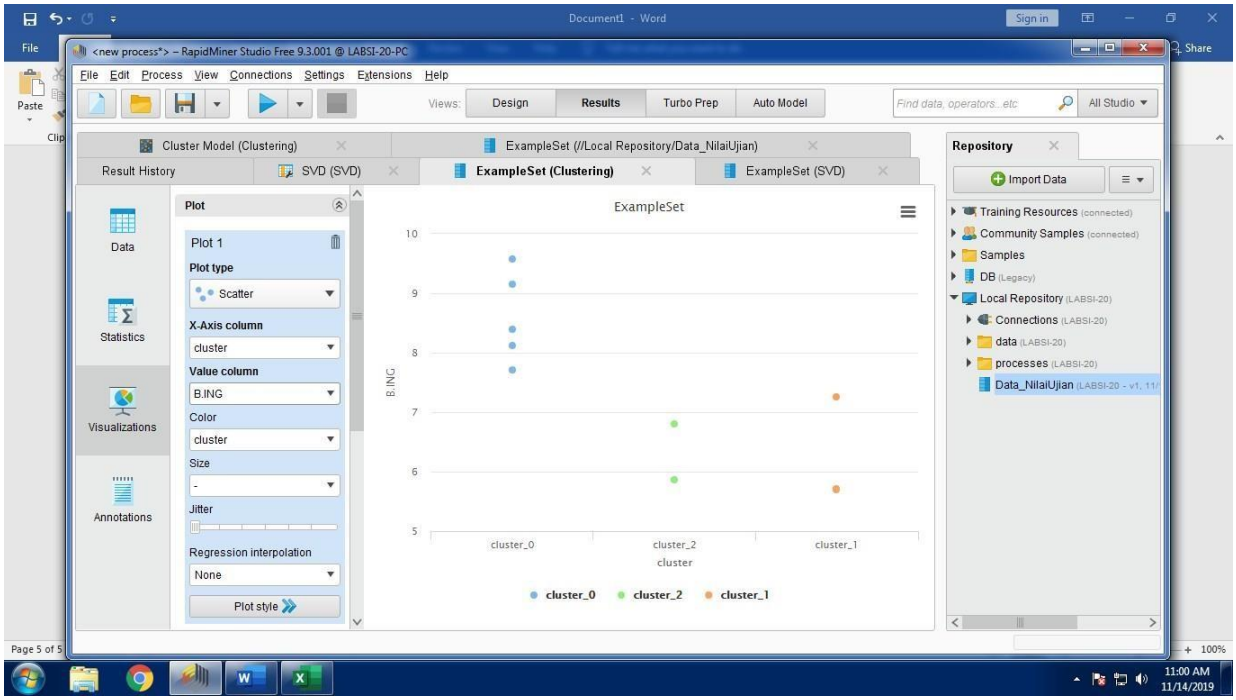
- Nilai Cumulative Variance



-
  - Kelompok siswa bidang B.indonesia



- Kelompok siswa bidang B.inggris

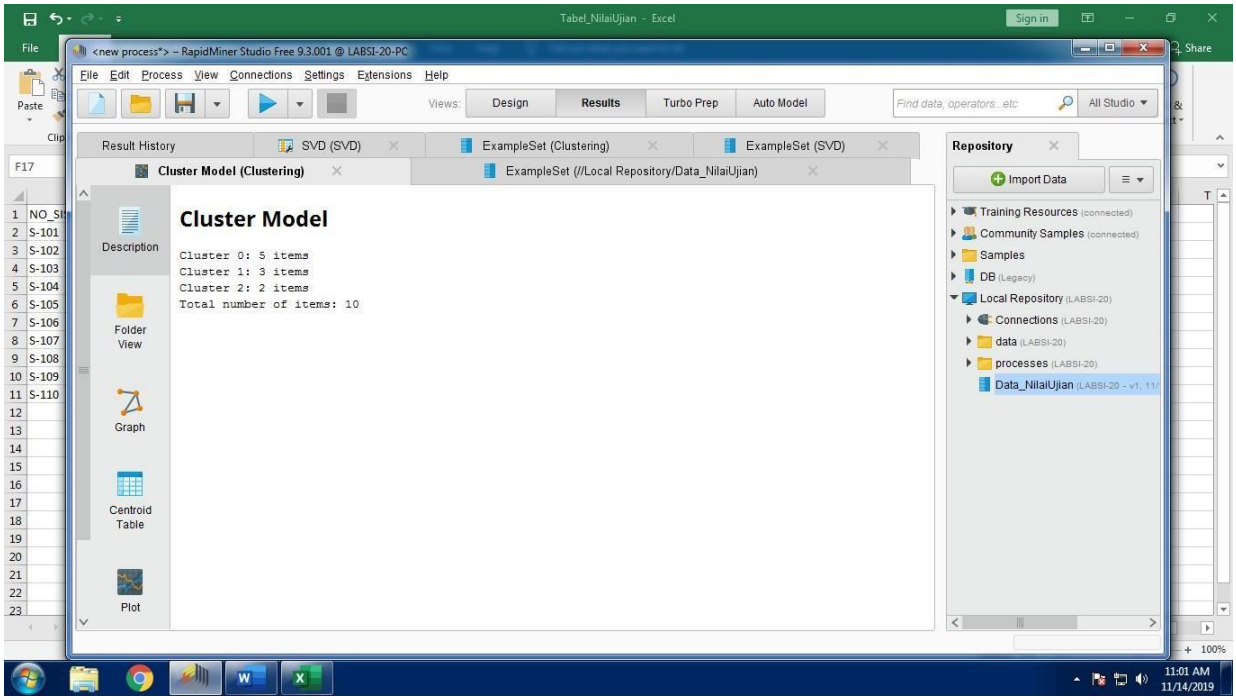


-
  - Kelompok masing-masing siswa yang dikelompokkan bedasarkan cluster 0, cluster 1, cluster 2.

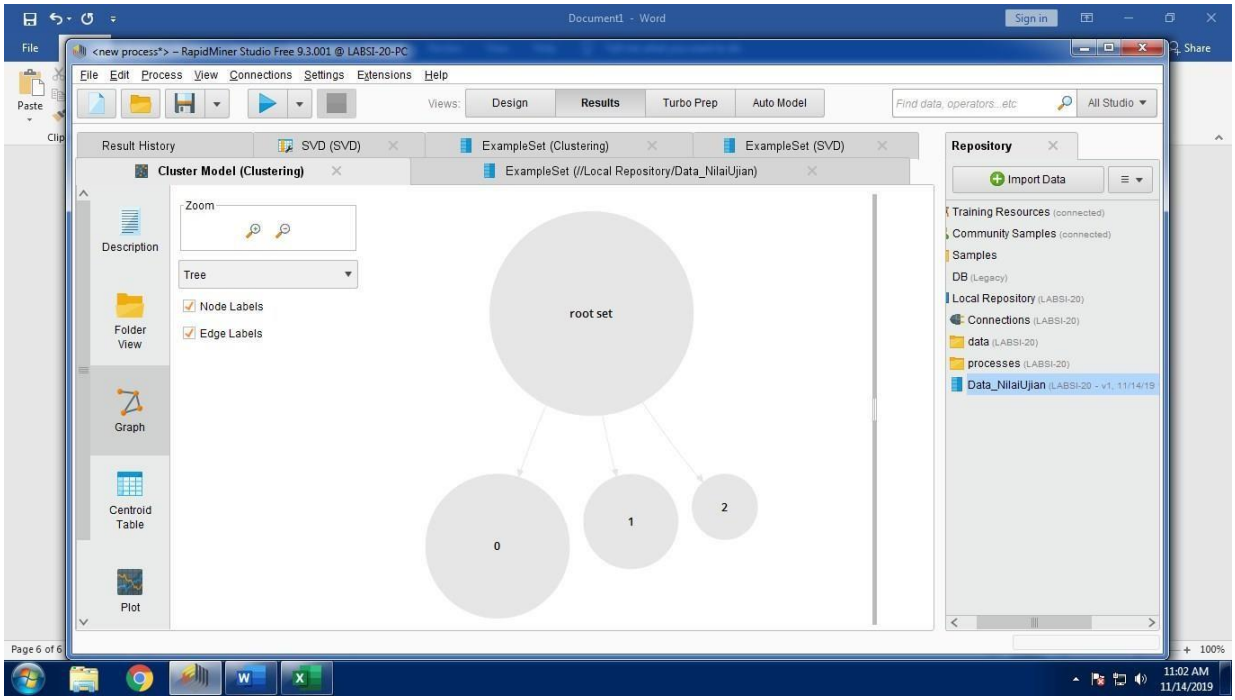
Row No.	NAMA	cluster ↑	B.INDO	B.ING
1	JOKO	cluster_0	8.540	8.400
3	SUSI	cluster_0	6.200	9.150
7	EKO	cluster_0	7.700	7.710
9	WAWAN	cluster_0	9	8.120
10	MAHMUD	cluster_0	9.810	9.580
4	DYAH	cluster_1	5.240	7.260
5	WATI	cluster_1	5.700	5.710
8	YANTO	cluster_1	6.600	5.700
2	AGUS	cluster_2	9.980	6.810
6	IKA	cluster_2	8.570	5.870

  -

- Description



-
  - Graph


Document1 - Word
<new process*> – RapidMiner Studio Free 9.3.001 @ LABSI-20-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)
ExampleSet (//Local Repository/Data_NilaiUjian)
Description
Folder View
Graph
Centroid Table
Plot
Zoom
Tree
Node Labels
Edge Labels
root set
0
1
2
Repository
Import Data
Training Resources (connected)
Community Samples (connected)
Samples
DB (Legacy)
Local Repository (LABSI-20)
Connections (LABSI-20)
data (LABSI-20)
processes (LABSI-20)
Data_NilaiUjian (LABSI-20 - v1, 11/14/19
11:02 AM
11/14/2019

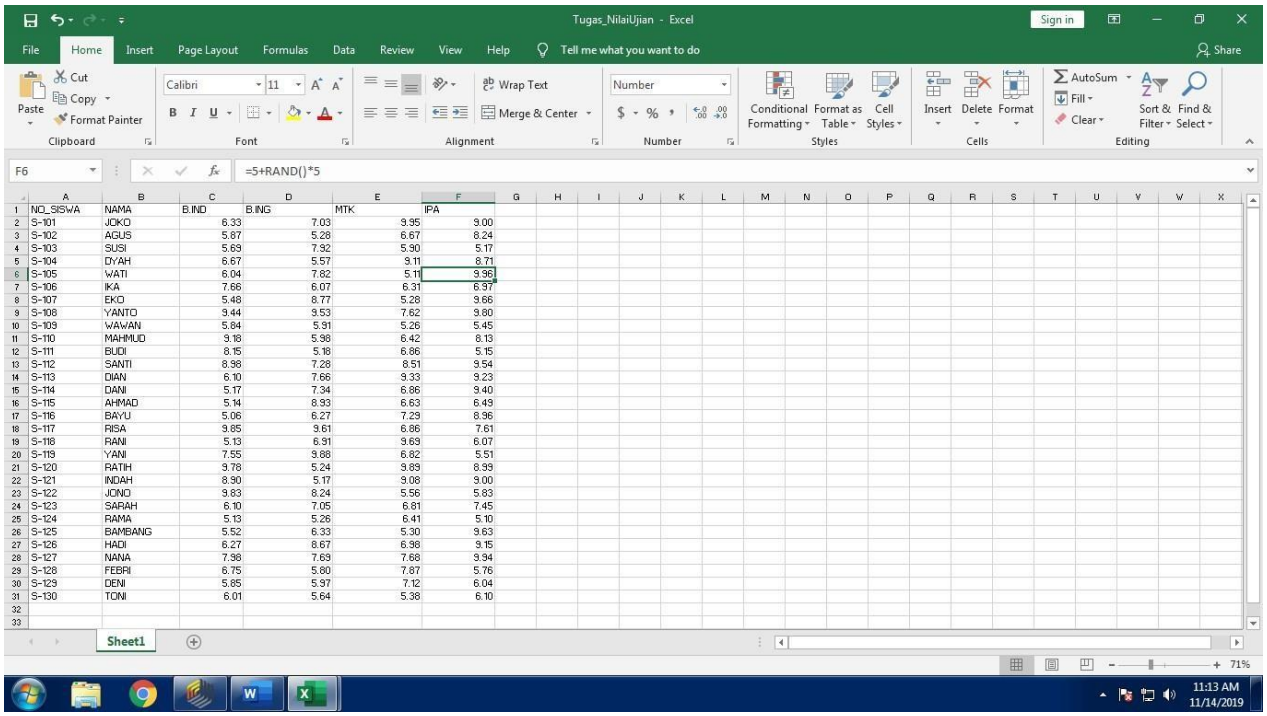
Kesimpulan :

Row No.	NAMA	cluster ↑	B.INDO	B.ING
1	JOKO	cluster_0	8.540	8.400
3	SUSI	cluster_0	6.200	9.150
7	EKO	cluster_0	7.700	7.710
9	WAWAN	cluster_0	9	8.120
10	MAHMUD	cluster_0	9.810	9.580
4	DYAH	cluster_1	5.240	7.260
5	WATI	cluster_1	5.700	5.710
8	YANTO	cluster_1	6.600	5.700
2	AGUS	cluster_2	9.980	6.810
6	IKA	cluster_2	8.570	5.870

1. Cluster 2 yang diajukan untuk lomba olimpiade bidang B.Indonesia
2. Cluster 0 yang diajukan untuk lomba olimpiade bidang B.Inggris

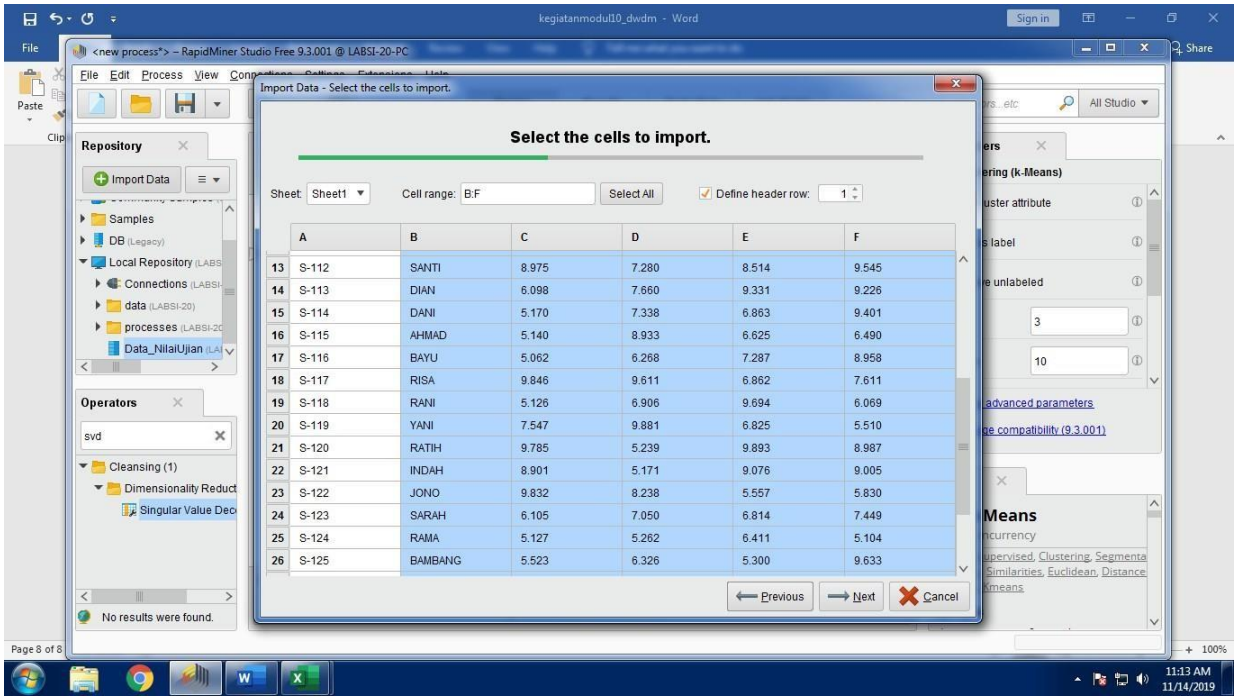
Tugas

- Berikut adalah table siswa dan memasukkan nilai secara random dengan =5+RAND()*5

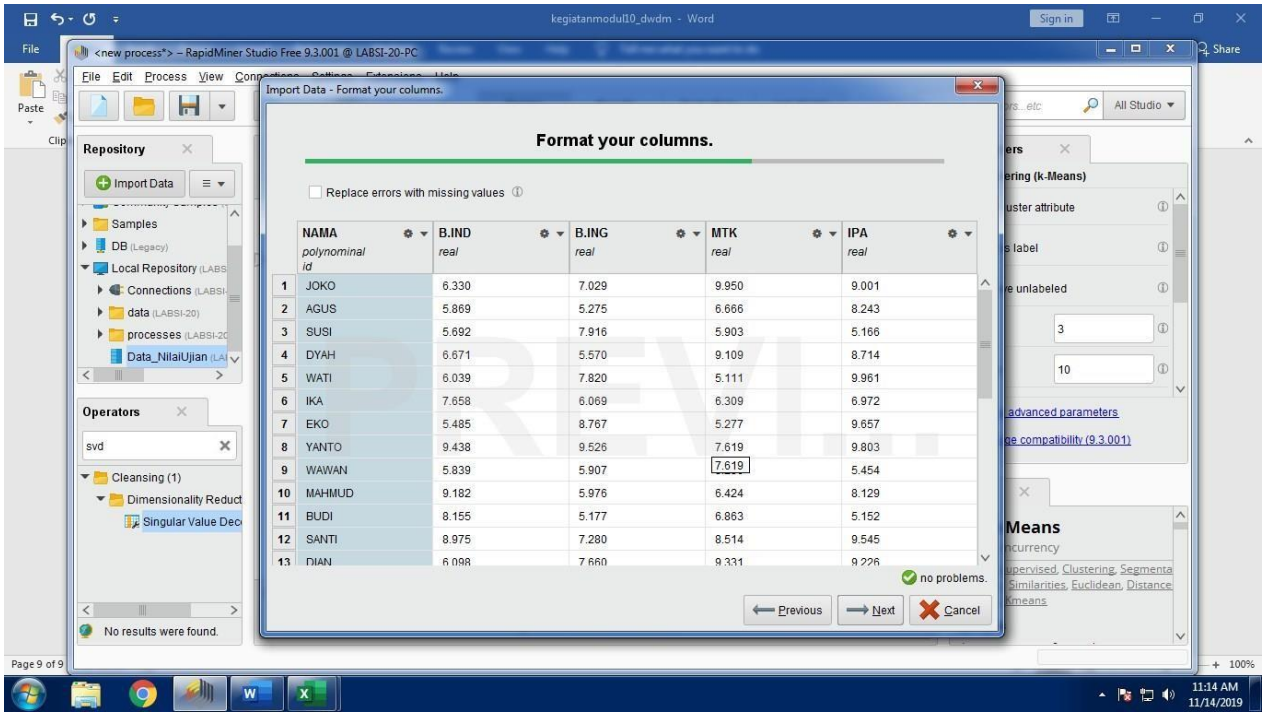


NO_SISWA	NAMA	B.IND	B.ING	MTK	IPA
S-101	JOKO	6.33	7.03	3.95	9.00
S-102	AGUS	5.87	5.28	6.67	8.24
S-103	SUSI	5.69	7.92	5.90	5.17
S-104	DYAH	6.67	5.57	3.11	8.71
S-105	WATI	6.04	7.82	5.11	3.96
S-106	IKA	7.66	6.07	6.31	6.37
S-107	EKO	5.48	8.77	5.28	9.66
S-108	YANTO	9.44	9.53	7.62	3.80
S-109	WAWAN	5.84	5.91	5.26	5.45
S-110	MAHMUD	9.18	5.98	6.42	8.13
S-111	BUDI	8.15	5.18	6.86	5.15
S-112	SANTI	8.98	7.28	8.51	9.54
S-113	DIAN	6.10	7.66	9.33	9.23
S-114	DANI	5.17	7.34	6.86	9.40
S-115	AHMAD	5.14	8.93	6.63	6.49
S-116	BAYU	5.06	6.27	7.29	8.96
S-117	RISA	9.85	9.61	6.86	7.61
S-118	RANI	5.13	6.91	9.69	6.07
S-119	YANI	7.55	9.88	6.82	5.51
S-120	RATIH	9.78	5.24	9.89	8.99
S-121	INDAH	8.90	5.17	9.08	9.00
S-122	JONO	9.83	8.24	5.56	5.83
S-123	SARAH	6.10	7.05	6.81	7.45
S-124	RAMA	5.13	5.26	6.41	5.10
S-125	BAMBANG	5.52	6.33	5.30	9.63
S-126	HADI	6.27	8.67	6.98	9.15
S-127	NANA	7.98	7.69	7.68	3.94
S-128	FEBRI	6.75	5.80	7.87	5.76
S-129	DENI	5.85	5.37	7.12	6.04
S-130	TONI	6.01	5.64	5.38	6.10

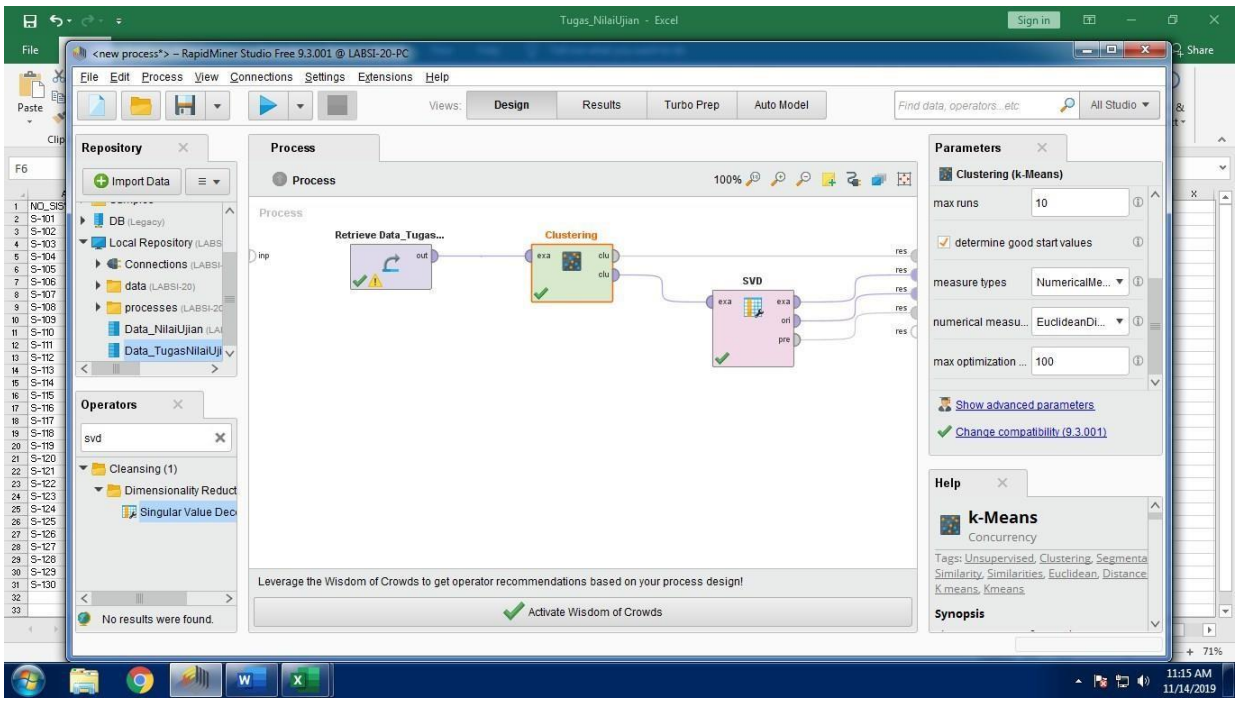
- Gunakan file Tugas_NilaiUjian.xlxs sebagai data yang akan digunakan dalam proses Clustering. Lalu import ke dalam aplikasi RapidMiner.



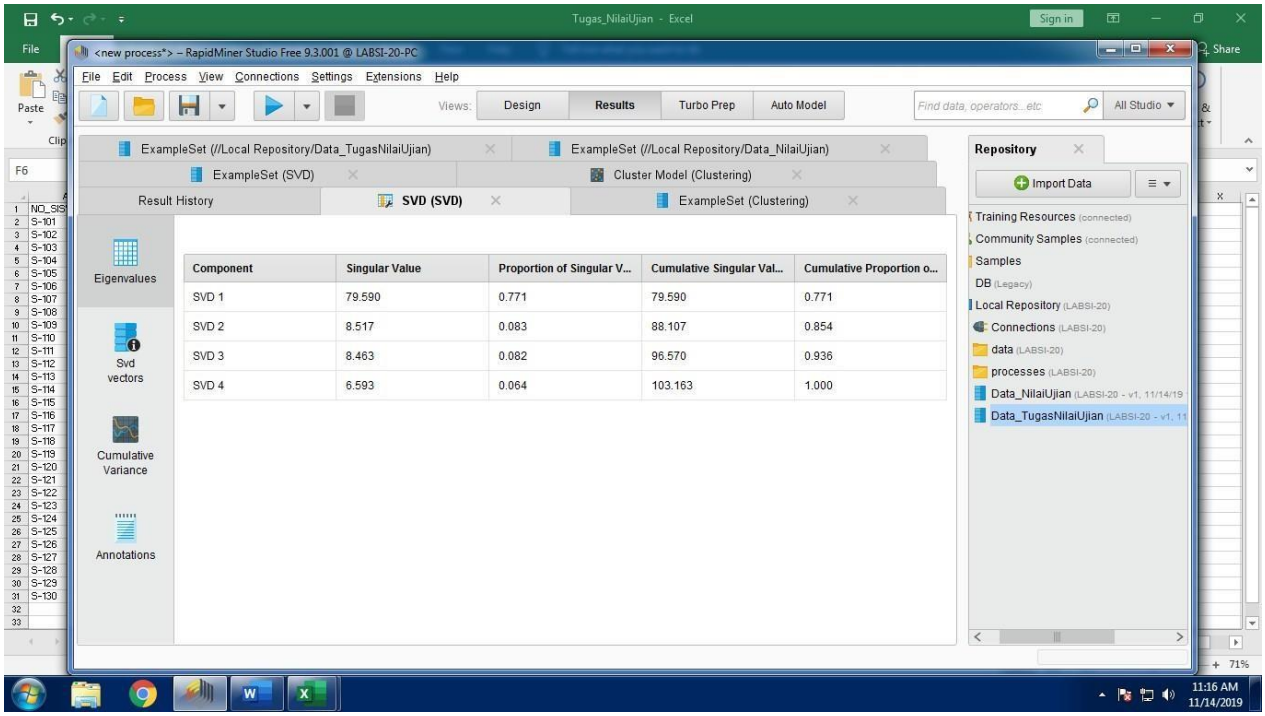
	A	B	C	D	E	F
13	S-112	SANTI	8.975	7.280	8.514	9.545
14	S-113	DIAN	6.098	7.660	9.331	9.226
15	S-114	DANI	5.170	7.338	6.863	9.401
16	S-115	AHMAD	5.140	8.933	6.625	6.490
17	S-116	BAYU	5.062	6.268	7.287	8.958
18	S-117	RISA	9.846	9.611	6.862	7.611
19	S-118	RANI	5.126	6.906	9.694	6.069
20	S-119	YANI	7.547	9.881	6.825	5.510
21	S-120	RATIH	9.785	5.239	9.893	8.987
22	S-121	INDAH	8.901	5.171	9.076	9.005
23	S-122	JONO	9.832	8.238	5.557	5.830
24	S-123	SARAH	6.105	7.050	6.814	7.449
25	S-124	RAMA	5.127	5.262	6.411	5.104
26	S-125	BAMBANG	5.523	6.326	5.300	9.633



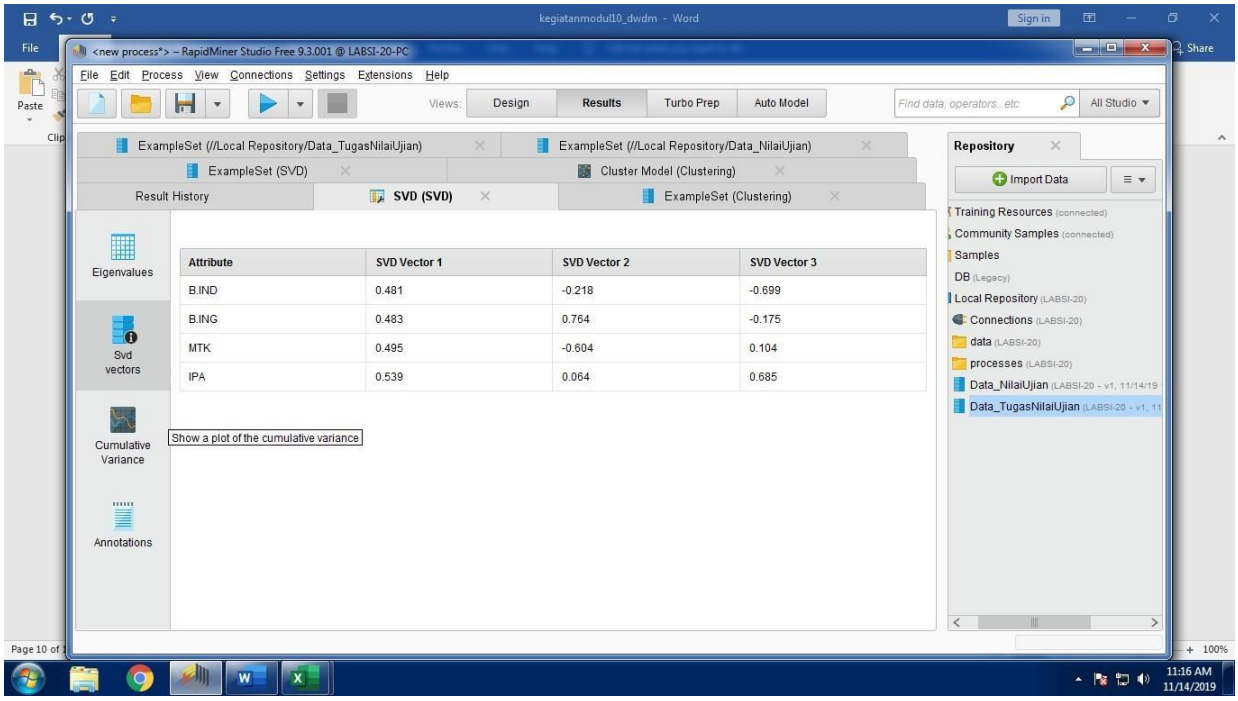
- Tambahkan operator k-Means. Lalu Jalankan dengan menekan tombol run (F11)



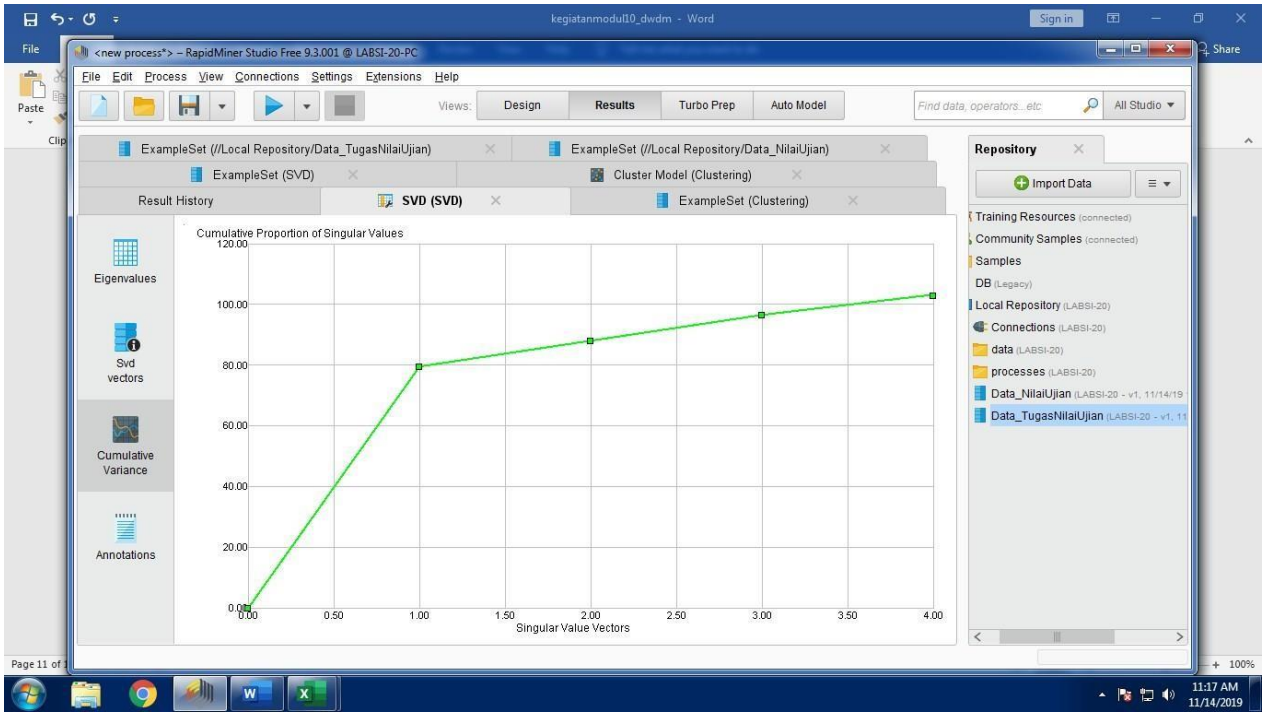
- Nilai Eigenvalue



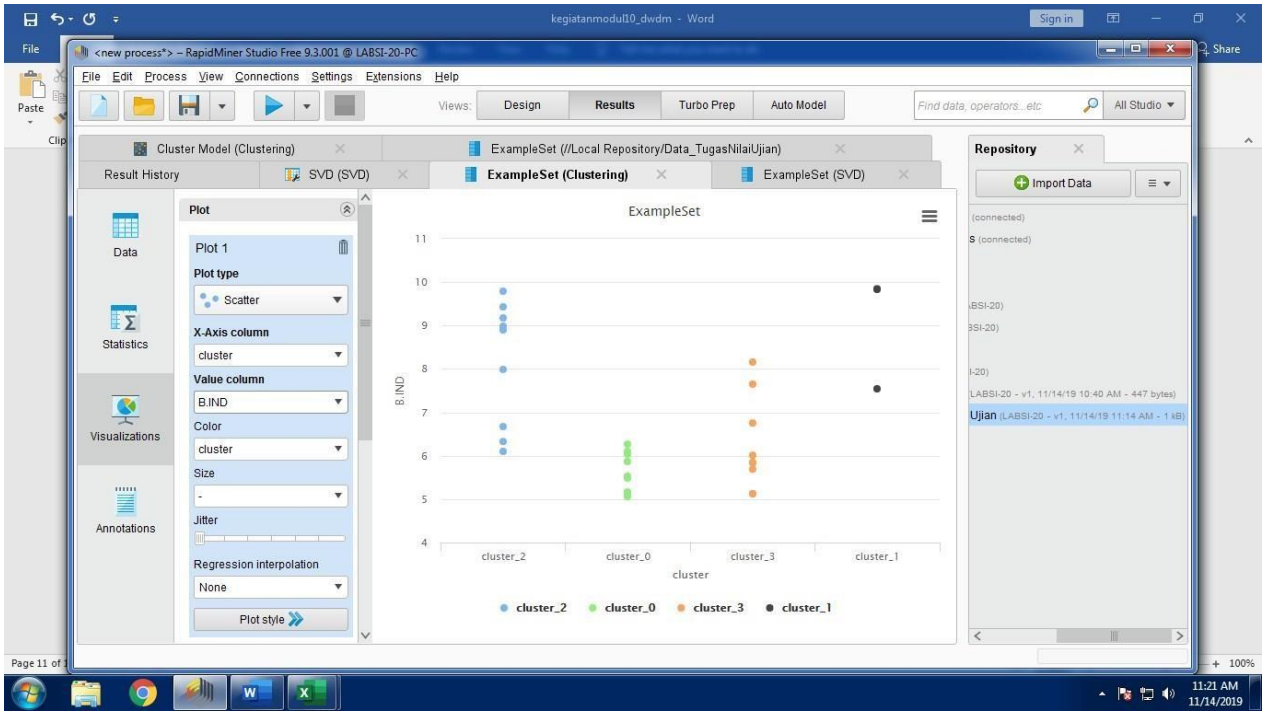
- Nilai Svd Vectors



- Nilai Cumulative Variance

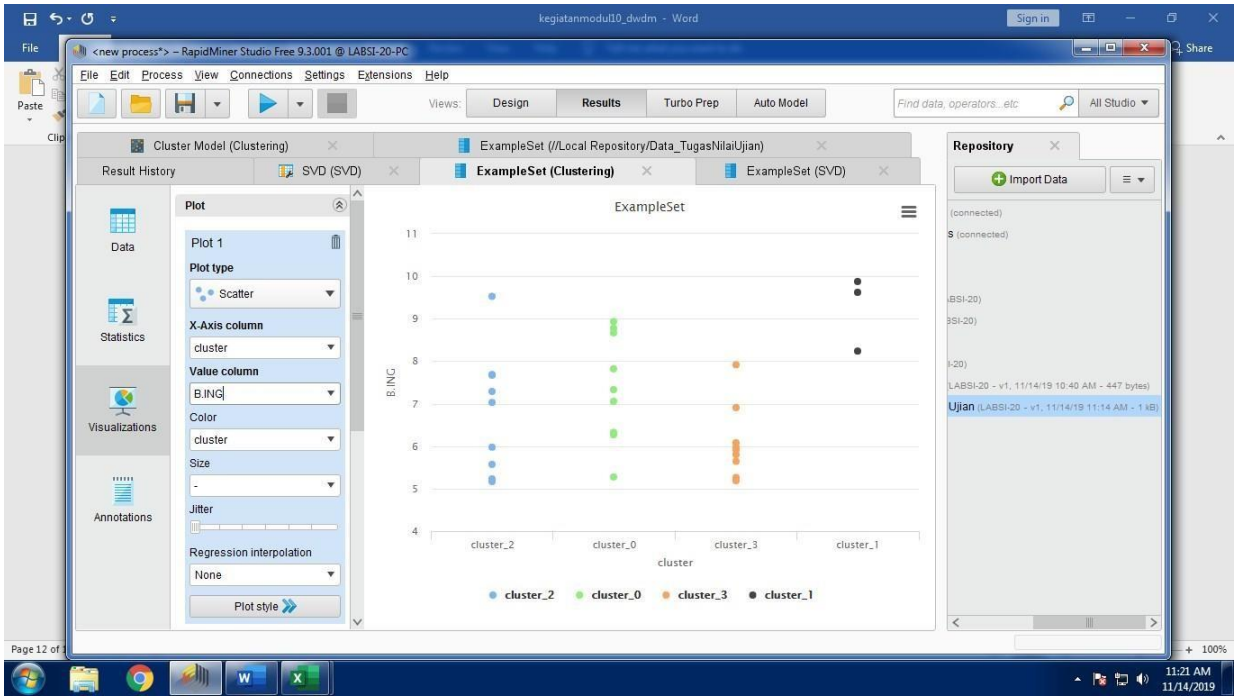


Kelompok siswa bidang B.INDO

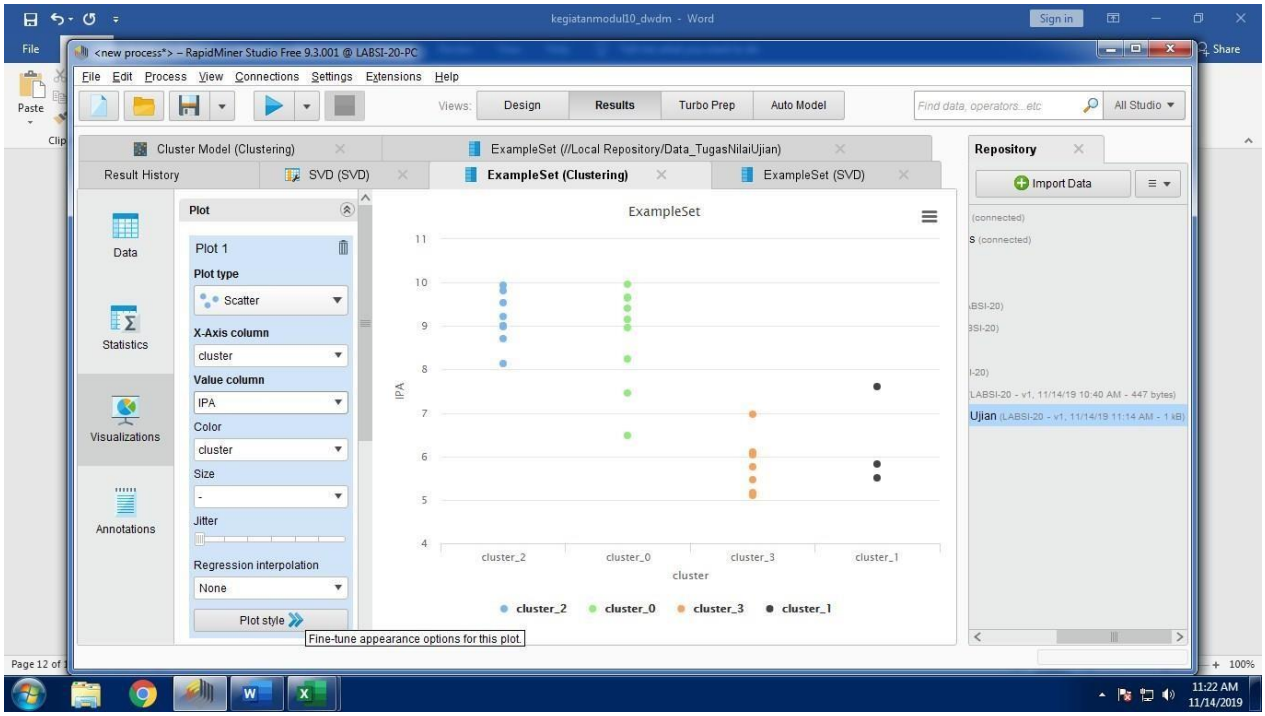


- Kelompok siswa kelompok B.ING

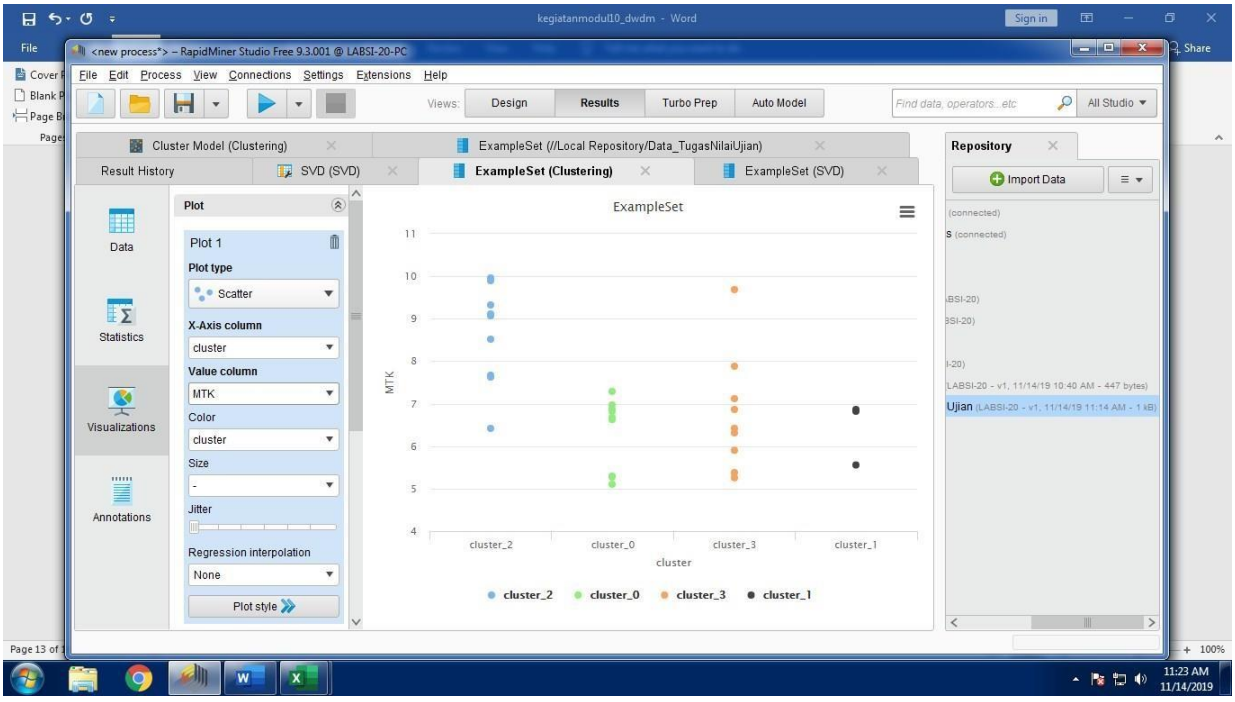
•


kegiatanmodul10_dwdm - Word
<new process*> – RapidMiner Studio Free 9.3.001 @ LABSI-20-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/Data_TugasNilaiUjian)
Result History
SVD (SVD)
ExampleSet (Clustering)
ExampleSet (SVD)
Repository
Import Data
Data
Statistics
Visualizations
Annotations
Plot
Plot 1
Plot type
Scatter
X-Axis column
cluster
Value column
B.ING
Color
cluster
Size
-
Jitter
Regression interpolation
None
Plot style
ExampleSet
B.ING
cluster
cluster_2
cluster_0
cluster_3
cluster_1
Ujian (LABSI-20 - v1, 11/14/19 11:14 AM - 1 kB)
11:21 AM
11/14/2019

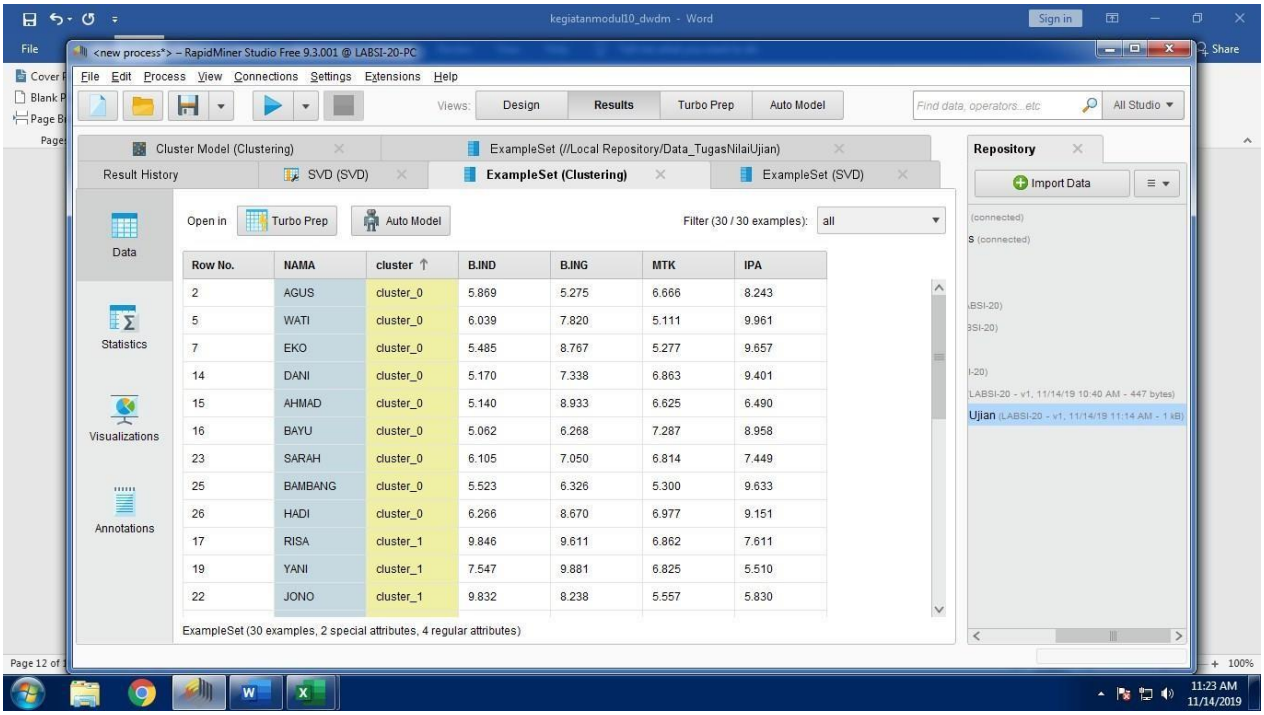
- Kelompok siswabidang IPA



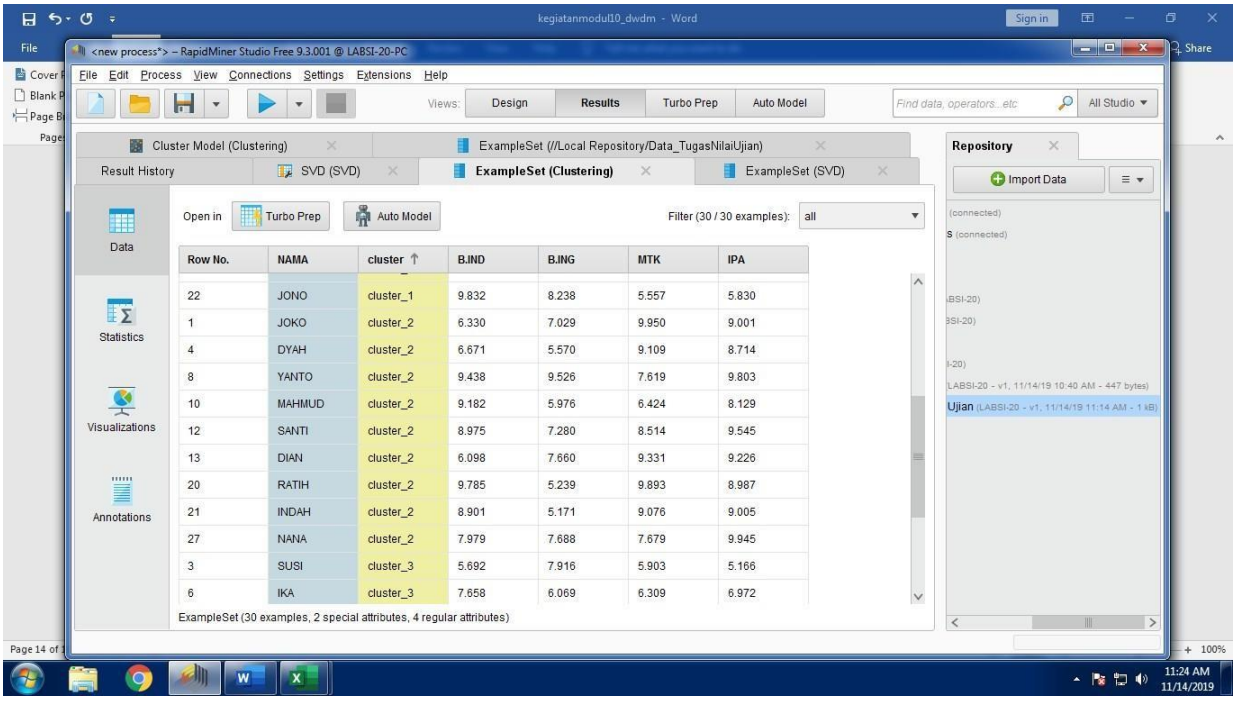
- Kelompok siswabidang MTK



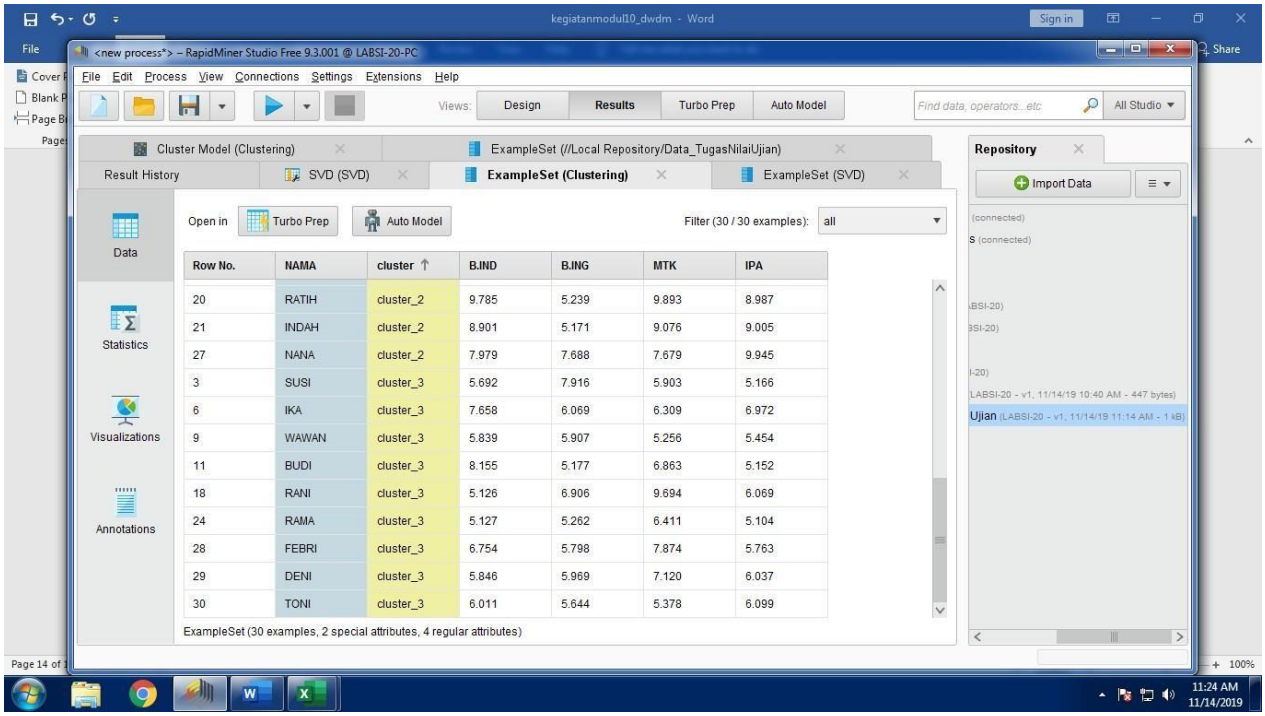
- Masing-masing nama siswa yang terdapat dalam kelompok cluster 0, cluster 1, cluster 2, cluster 3.



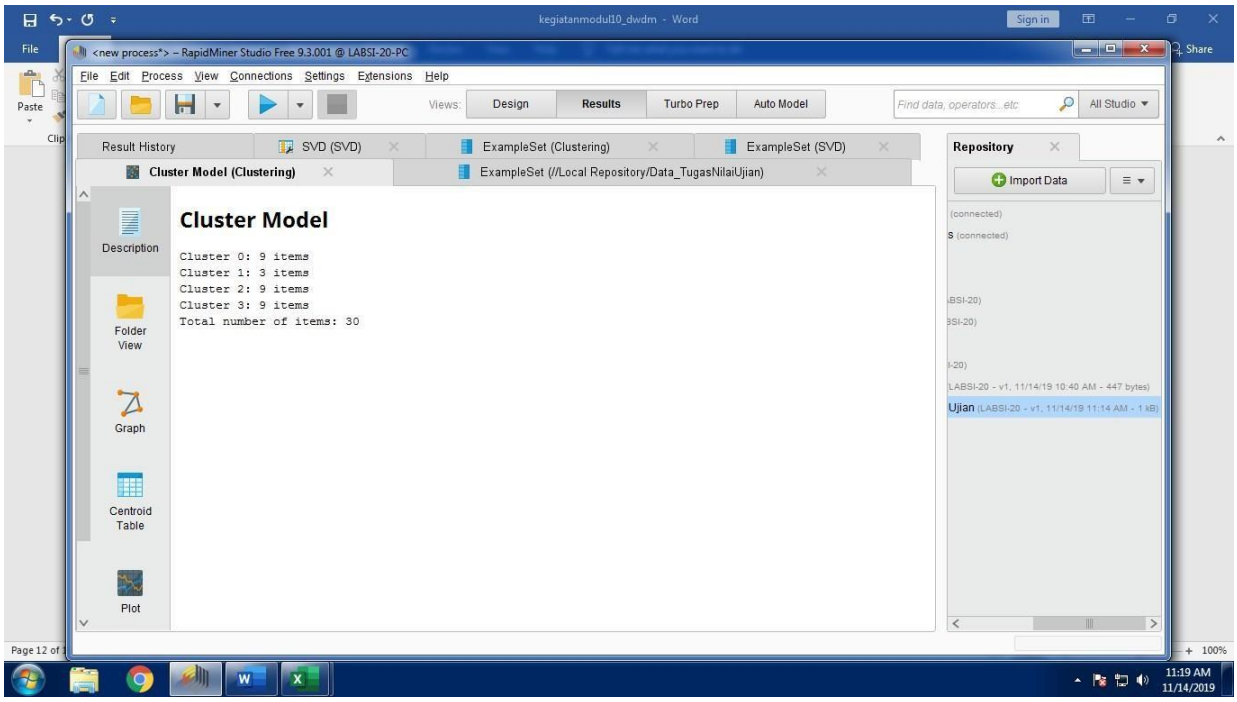
Row No.	NAMA	cluster	B.IND	B.ING	MTK	IPA
2	AGUS	cluster_0	5.869	5.275	6.666	8.243
5	WATI	cluster_0	6.039	7.820	5.111	9.961
7	EKO	cluster_0	5.485	8.767	5.277	9.657
14	DANI	cluster_0	5.170	7.338	6.863	9.401
15	AHMAD	cluster_0	5.140	8.933	6.625	6.490
16	BAYU	cluster_0	5.062	6.268	7.287	8.958
23	SARAH	cluster_0	6.105	7.050	6.814	7.449
25	BAMBANG	cluster_0	5.523	6.326	5.300	9.633
26	HADI	cluster_0	6.266	8.670	6.977	9.151
17	RISA	cluster_1	9.846	9.611	6.862	7.611
19	YANI	cluster_1	7.547	9.881	6.825	5.510
22	JONO	cluster_1	9.832	8.238	5.557	5.830



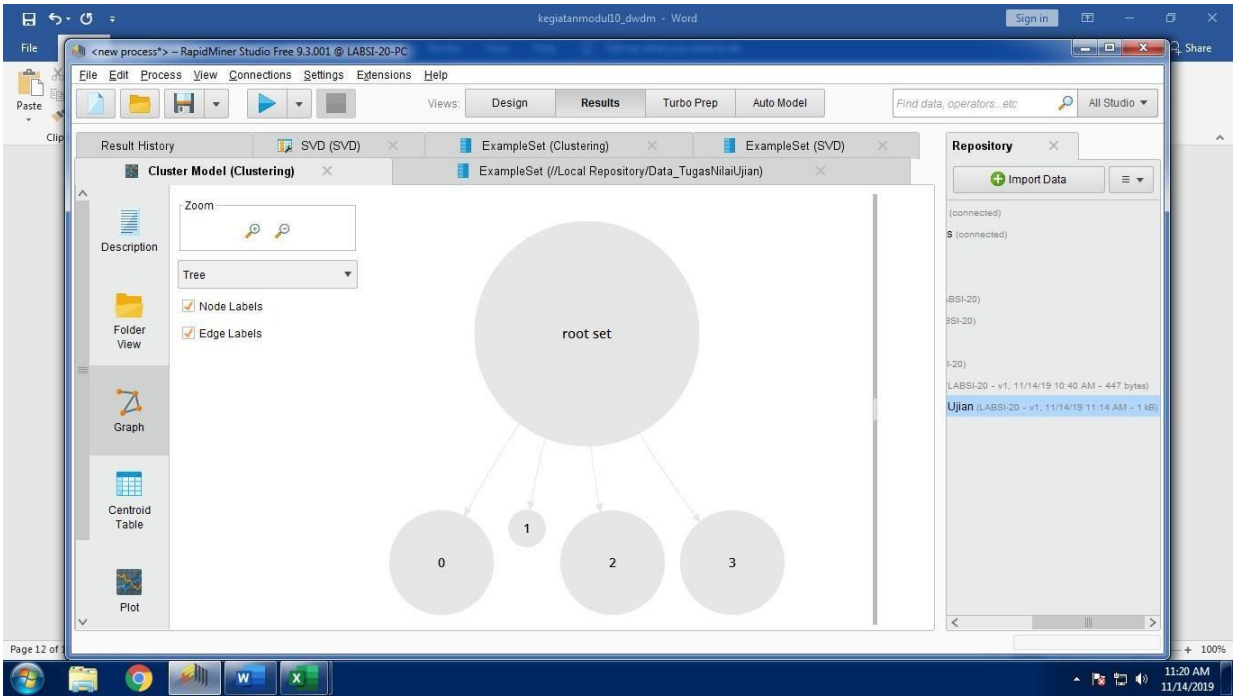
Row No.	NAMA	cluster	B.IND	B.ING	MTK	IPA
22	JONO	cluster_1	9.832	8.238	5.557	5.830
1	JOKO	cluster_2	6.330	7.029	9.950	9.001
4	DYAH	cluster_2	6.671	5.570	9.109	8.714
8	YANTO	cluster_2	9.438	9.526	7.619	9.803
10	MAHMUD	cluster_2	9.182	5.976	6.424	8.129
12	SANTI	cluster_2	8.975	7.280	8.514	9.545
13	DIAN	cluster_2	6.098	7.660	9.331	9.226
20	RATIH	cluster_2	9.785	5.239	9.893	8.987
21	INDAH	cluster_2	8.901	5.171	9.076	9.005
27	NANA	cluster_2	7.979	7.688	7.679	9.945
3	SUSI	cluster_3	5.692	7.916	5.903	5.166
6	IKA	cluster_3	7.658	6.069	6.309	6.972



- Description



- Graph


kegiatanmodul10_dwdm - Word
<new process*> – RapidMiner Studio Free 9.3.001 @ LABSI-20-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)
ExampleSet (//Local Repository/Data_TugasNilaiUjian)
Repository
Import Data
Description
Folder View
Graph
Centroid Table
Plot
Zoom
Tree
Node Labels
Edge Labels
root set
0
1
2
3
Ujian (LABSI-20 - v1, 11/14/19 11:14 AM - 1 kB)
11:20 AM
11/14/2019