

Nama : REZA MIFTAHUL RIZKI

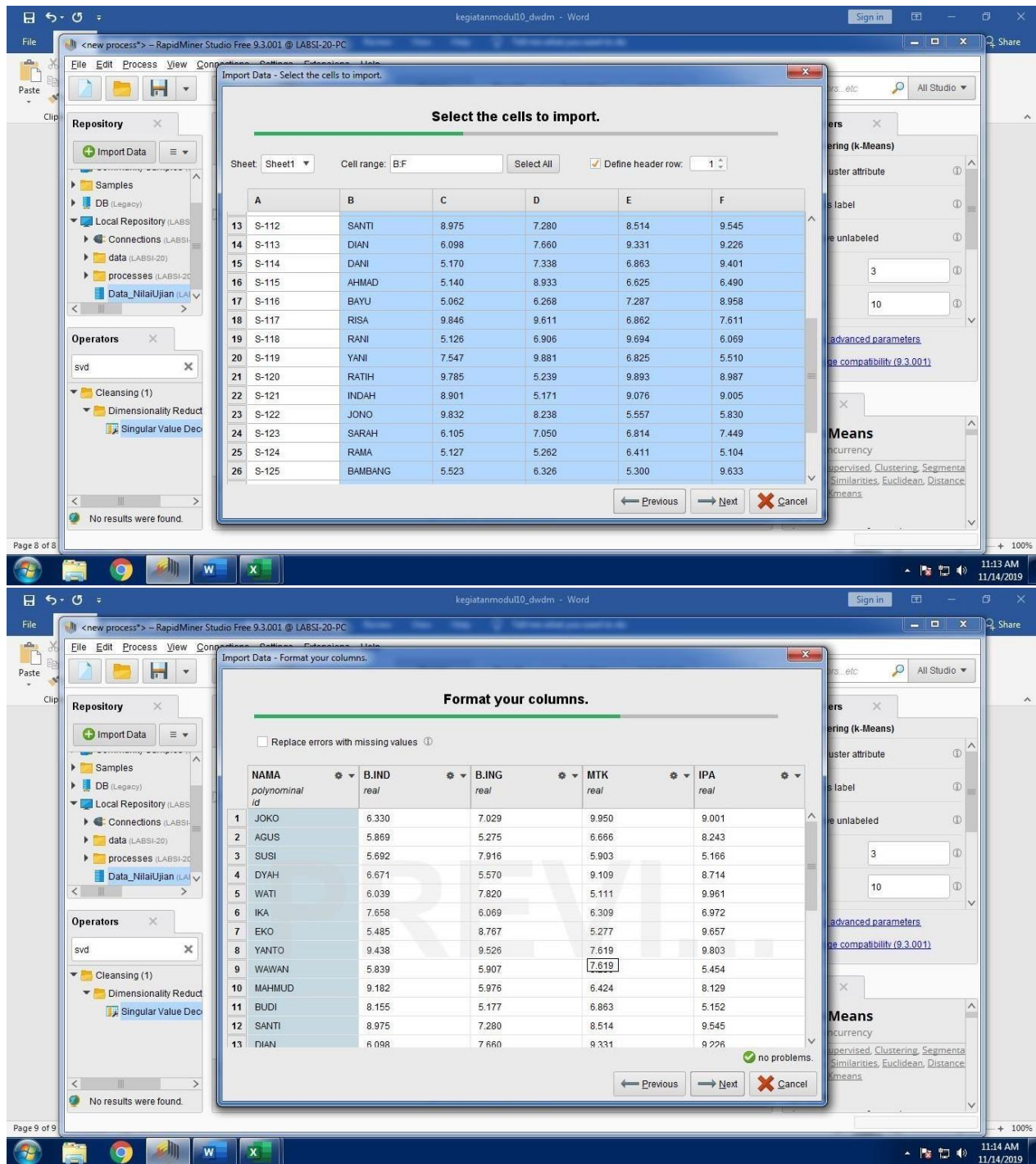
NIM : L200170108

## 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	9.95	9.00
S-102	AGUS	5.87	5.28	6.67	8.24
S-103	SUSI	5.69	7.32	5.90	5.17
S-104	DYAH	6.67	5.57	3.11	8.71
S-105	WATI	6.04	7.82	5.11	3.38
S-106	IKA	7.66	6.07	6.31	6.97
S-107	EKO	5.48	8.77	5.28	9.66
S-108	YANTO	3.44	9.53	7.62	9.80
S-109	WAWAN	5.84	5.91	5.26	5.45
S-110	MAHMUD	3.16	5.98	6.42	8.13
S-111	BUDI	8.15	5.10	6.86	5.15
S-112	SANTI	8.38	7.28	8.51	9.54
S-113	DIAN	6.10	7.66	3.33	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	3.95	9.61	6.88	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	RATH	3.78	5.24	9.89	8.99
S-121	INDAH	8.90	5.17	9.08	9.00
S-122	JOWO	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	3.15
S-127	NANA	7.98	7.63	7.68	9.94
S-128	FEBRI	6.75	5.80	7.87	5.76
S-129	DENI	5.85	5.97	7.12	6.04
S-130	TONI	6.01	5.64	5.38	6.10

- Gunakan file Tugas\_NilaiUjian.xlsx sebagai data yang akan digunakan dalam proses Clustering. Lalu import ke dalam aplikasi RapidMiner.



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

Tugas\_NilaiUjian - Excel

Sign in

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Repository

- Import Data
- DB (Legacy)
- Local Repository (LABSI-20)
  - data (LABSI-20)
  - processes (LABSI-20)
  - Data\_NilaiUjian (LABSI-20)
  - Data\_TugasNilaiUjian (LABSI-20)

Operators

- svd
- Cleansing (1)
- Dimensionality Reduction
  - Singular Value Decomposition

Process

Process

Retrieve Data\_TugasNilaiUjian

Clustering

SVD

Parameters

Clustering (k-Means)

max runs: 10

☒ determine good start values

measure types: NumericalMeasure

numerical measure: EuclideanDistance

max optimization iterations: 100

[Show advanced parameters](#)

☒ [Change compatibility \(9.3.001\)](#)

Help

k-Means

Concurrency

Tags: Unsupervised, Clustering, Segmentation, Similarity, Similarities, Euclidean, Distance, K means, Kmeans

Synopsis

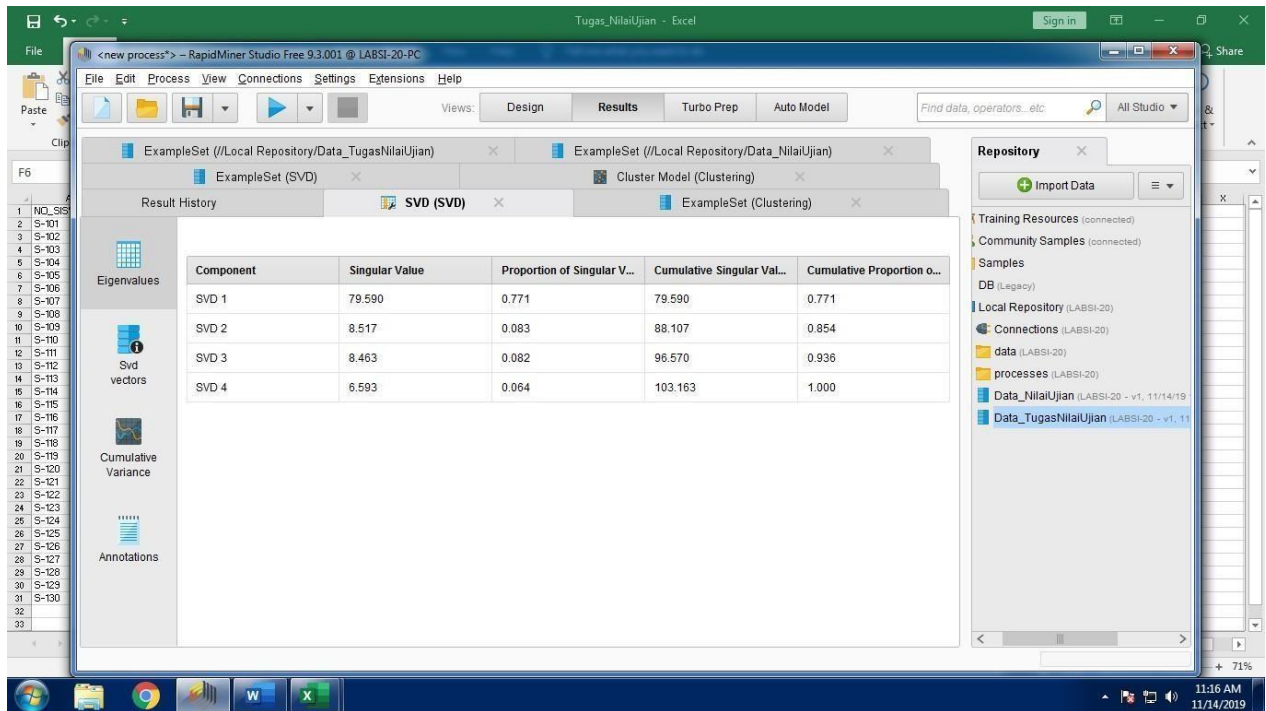
Leverage the Wisdom of Crowds to get operator recommendations based on your process design!

☒ Activate Wisdom of Crowds

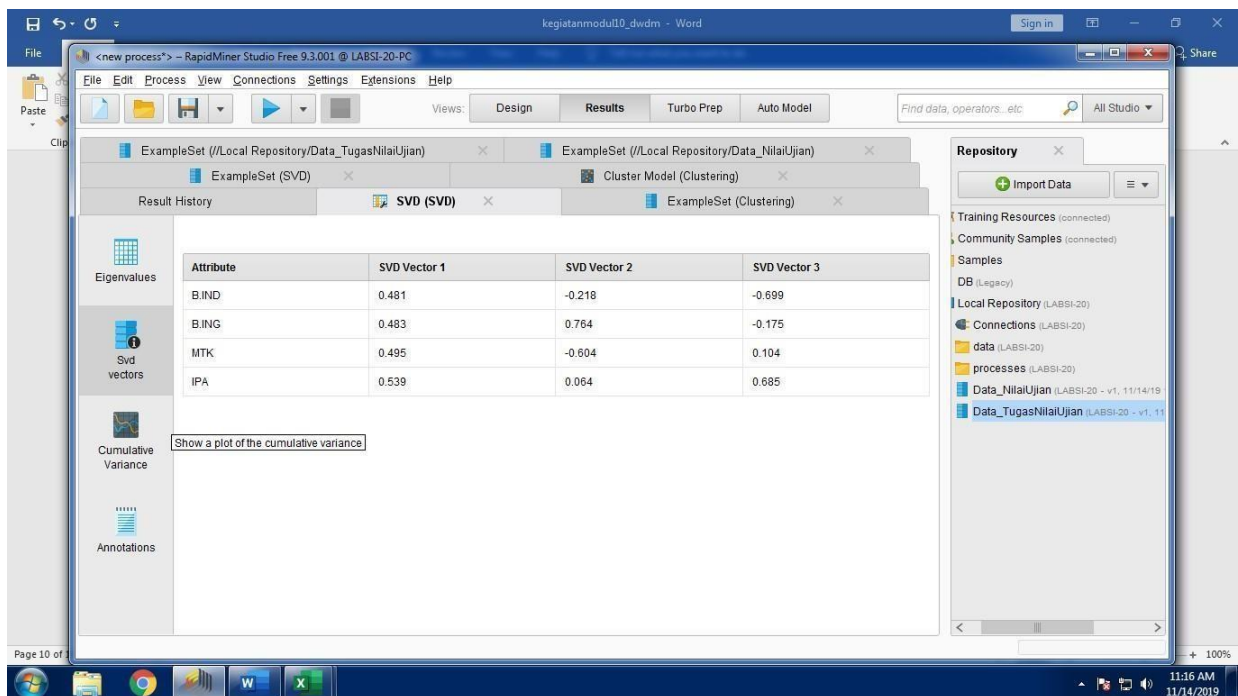
No results were found.

11:15 AM 11/14/2019

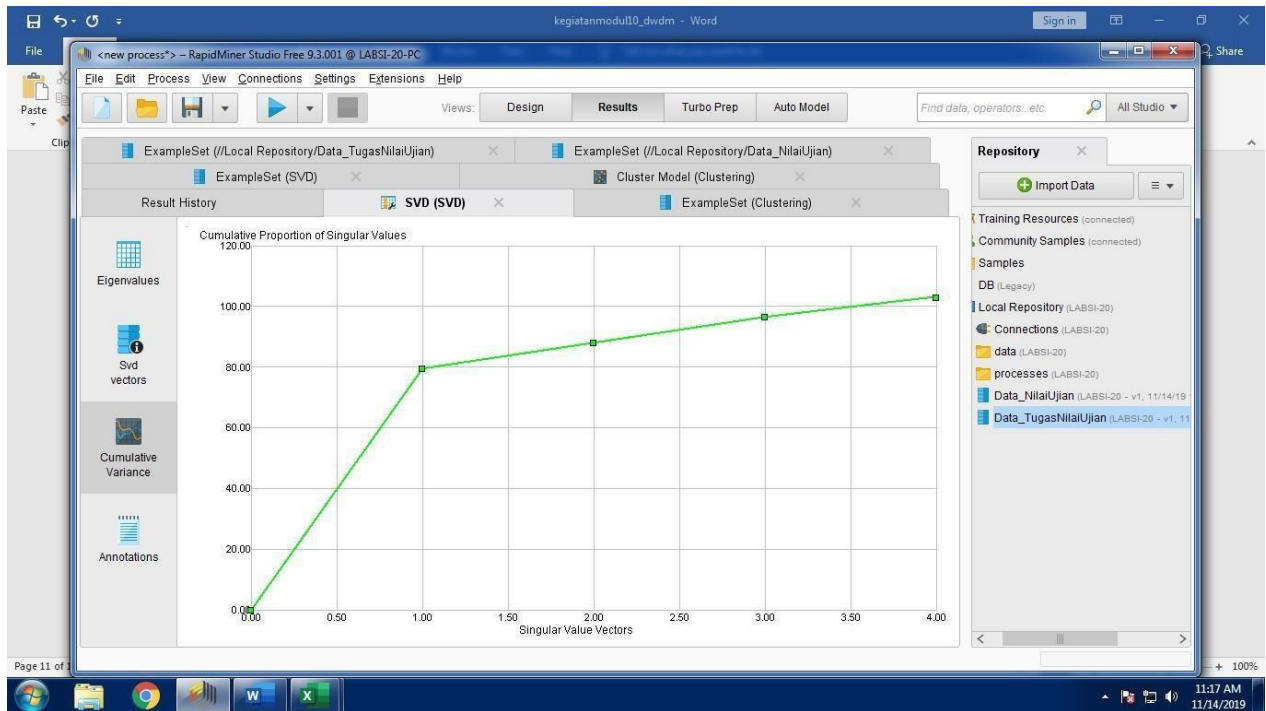
## Nilai Eigenvalue



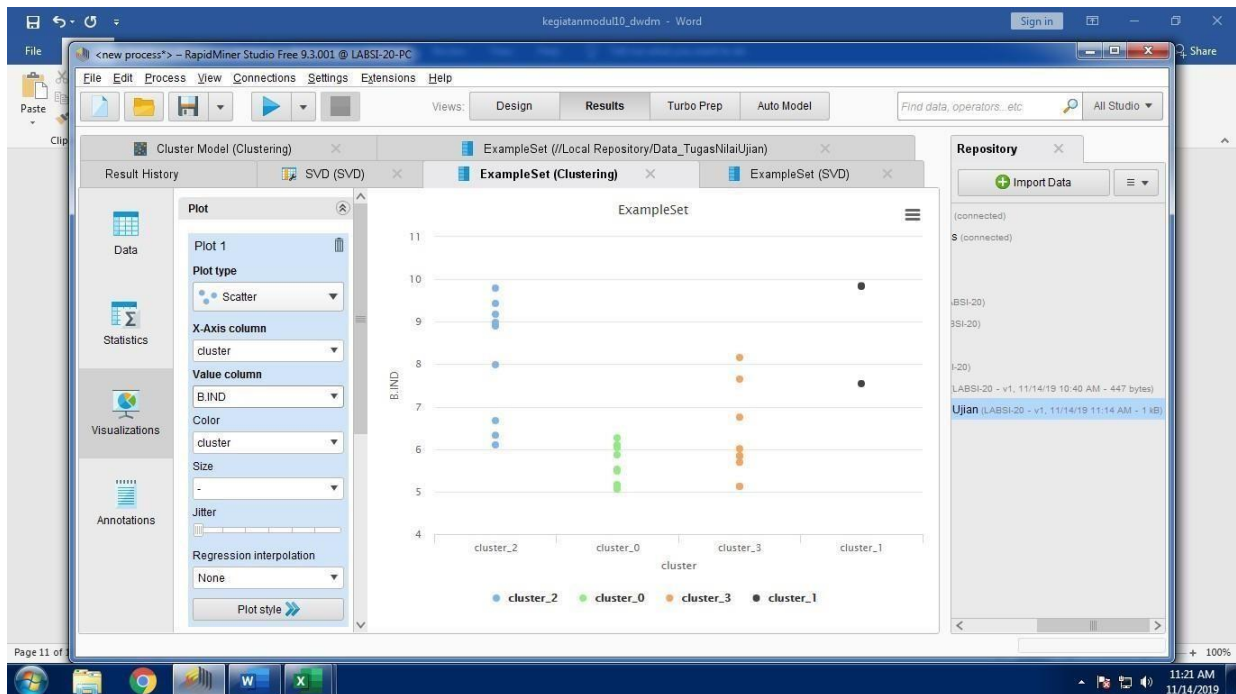
## Nilai Svd Vectors



## Nilai Cumulative Variance

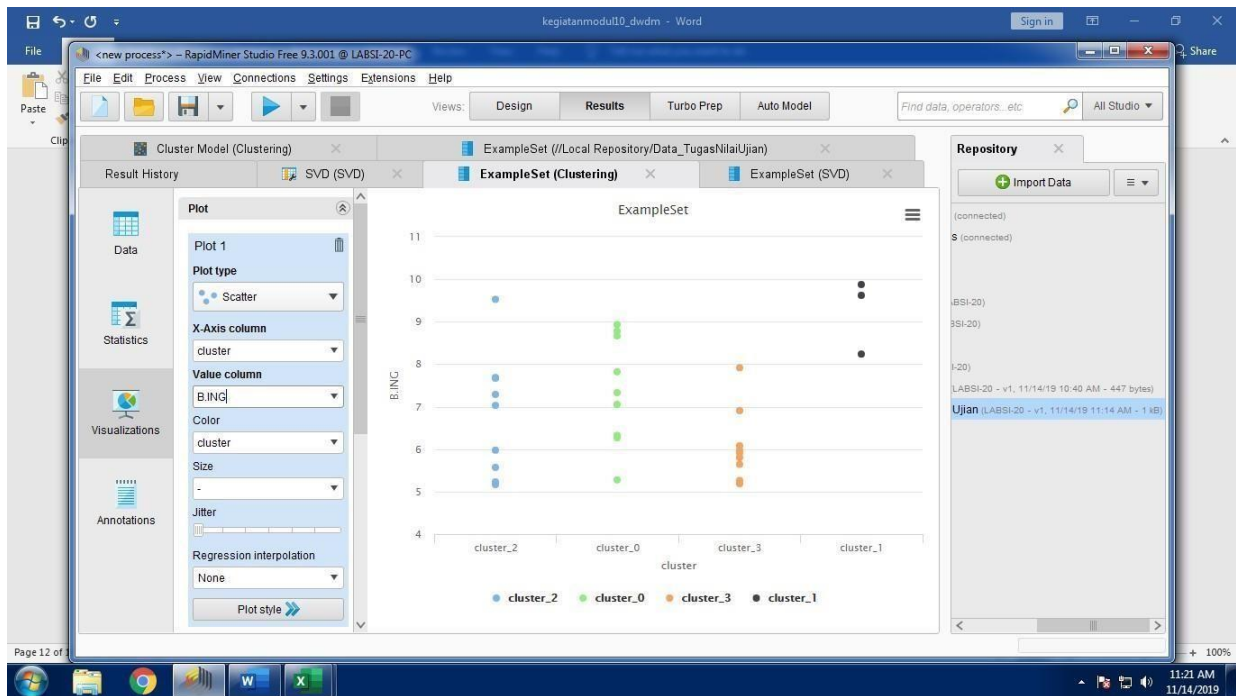


## Kelompok siswa bidang B.INDO

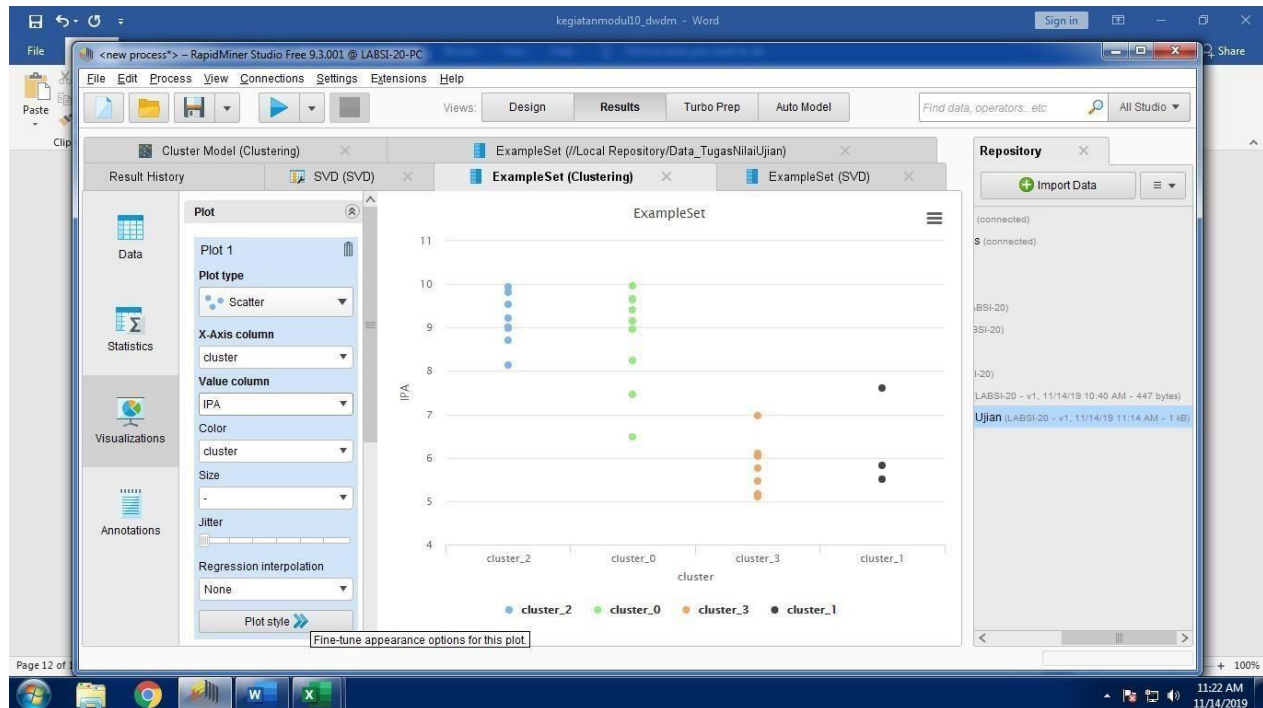




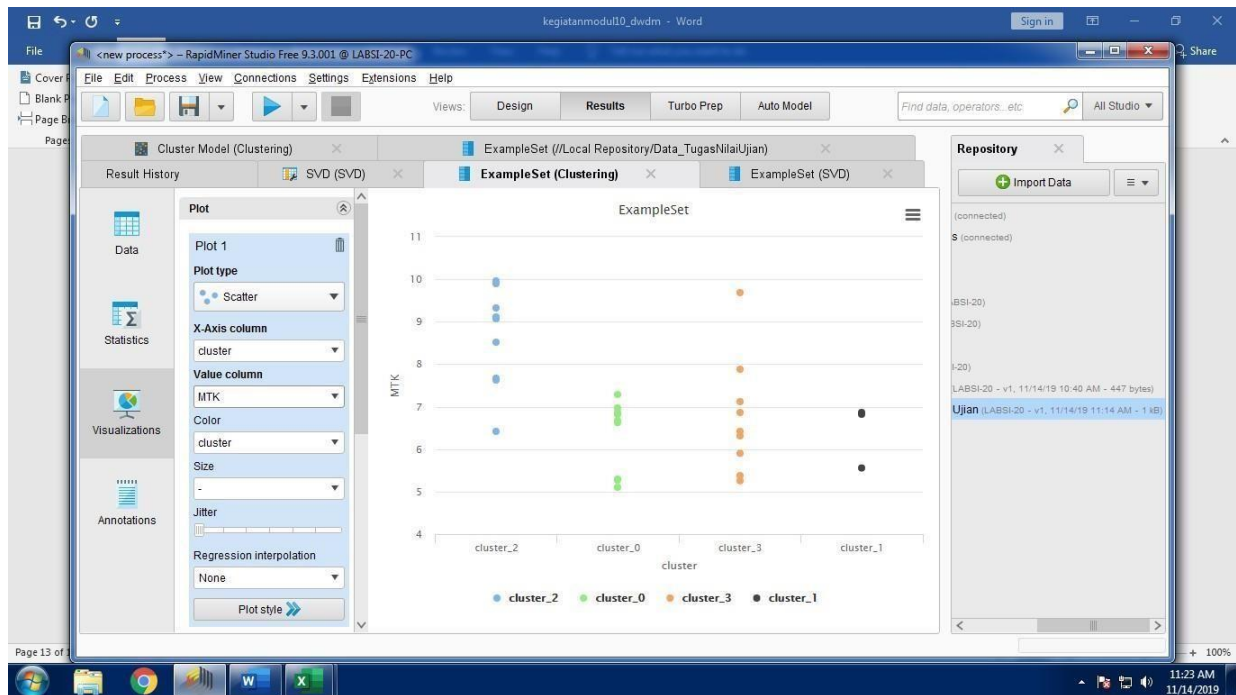
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- Kelompok siswa kelompok B.ING



- Kelompok siswa bidang IPA



- Kelompok siswa bidang MTK



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

The screenshot shows the RapidMiner Studio interface with the 'Results' tab selected. The main window displays a table of 30 examples, filtered to show all examples. The table has columns: Row No., NAMA, cluster ↑, B.IND, B.JING, MTK, and IPA. The data is grouped by cluster, with cluster\_0 and cluster\_1 highlighted in yellow.

Row No.	NAMA	cluster ↑	B.IND	B.JING	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

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

The screenshot shows the RapidMiner Studio interface with the 'Results' tab selected. The main window displays a table of 30 examples, filtered to show all examples. The table has columns: Row No., NAMA, cluster ↑, B.IND, B.JING, MTK, and IPA. The data is grouped by cluster, with cluster\_2 and cluster\_3 highlighted in yellow.

Row No.	NAMA	cluster ↑	B.IND	B.JING	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

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



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Row No.	NAMA	cluster	B.IND	B.ING	MTK	IPA
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
9	WAWAN	cluster_3	5.839	5.907	5.256	5.454
11	BUDI	cluster_3	8.155	5.177	6.863	5.152
18	RANI	cluster_3	5.126	6.906	9.694	6.069
24	RAMA	cluster_3	5.127	5.262	6.411	5.104
28	FEBRI	cluster_3	6.754	5.798	7.874	5.763
29	DENI	cluster_3	5.846	5.969	7.120	6.037
30	TONI	cluster_3	6.011	5.644	5.378	6.099

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

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## • Description

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**Cluster Model**

Description

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

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## • Graph

