NAMA : Yuda Dwi Nurcahyo

NIM : L200170126
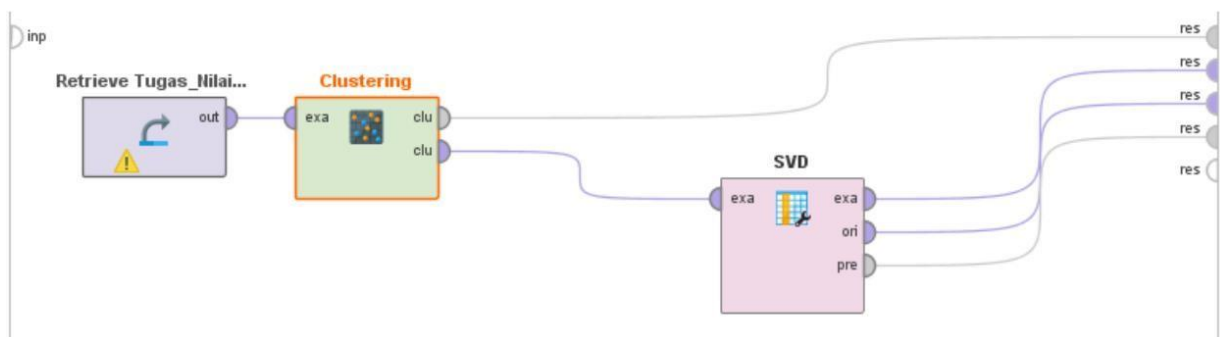
KELAS : E

**TUGAS**

## MODUL 10
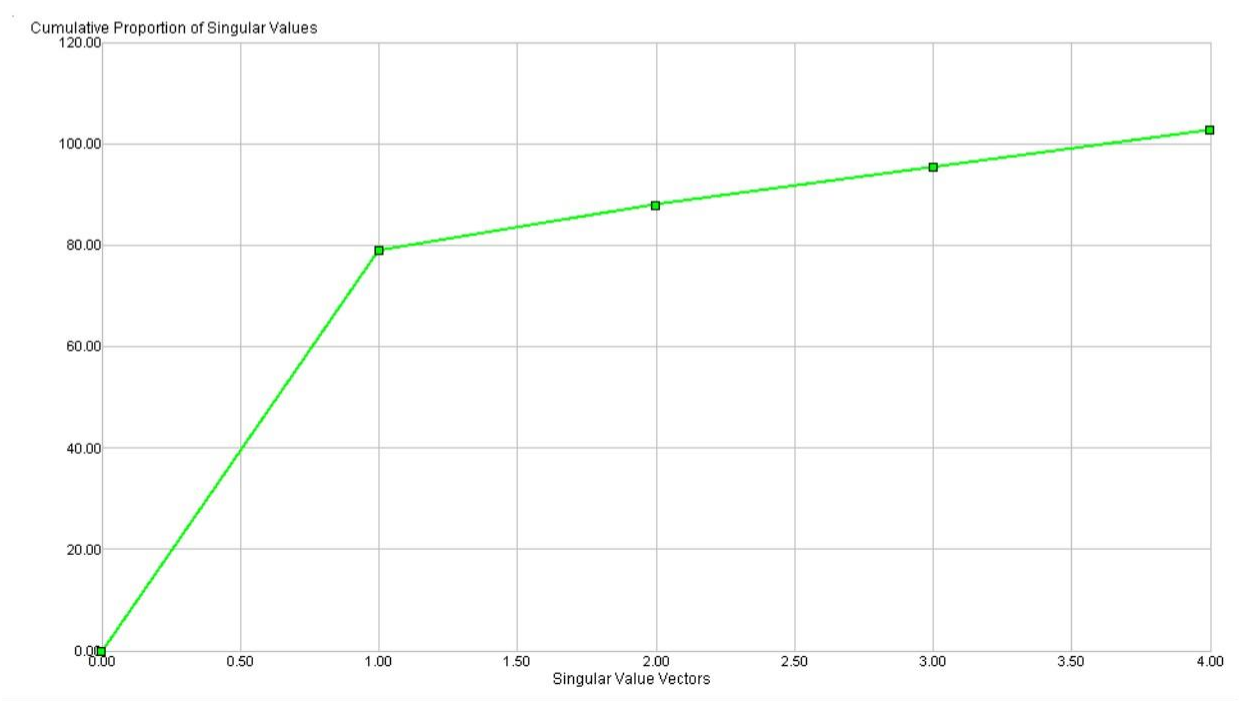
| Row No. | NAMA | B.IND | B.ING | MTK | IPA |
|---------|------|-------|-------|-----|-----|
| 1 | JOKO | 6.958 | 6.772 | 5.294 | 7.276 |
| 2 | AGUS | 8.355 | 8.670 | 5.173 | 9.004 |
| 3 | SUSI | 7.596 | 7.133 | 9.749 | 9.071 |
| 4 | DYAH | 6.078 | 7.194 | 9.785 | 9.424 |
| 5 | WATI | 9.647 | 6.191 | 9.955 | 6.255 |
| 6 | IKA | 5.699 | 5.148 | 7.449 | 6.662 |
| 7 | EKO | 5.079 | 8.902 | 7.531 | 5.403 |
| 8 | YANTO | 7.011 | 9.744 | 7.358 | 5.262 |
| 9 | WAWAN | 5.741 | 8.842 | 5.977 | 7.668 |
| 10 | MAHMUD | 6.816 | 9.743 | 7.010 | 8.830 |
| 11 | BUDI | 6.236 | 9.883 | 6.611 | 7.707 |
| 12 | SANTI | 5.144 | 6.881 | 6.723 | 5.051 |
| 13 | DIAN | 7.999 | 9.295 | 7.863 | 7.329 |

| 14 | DANI | 9.899 | 6.667 | 6.465 | 5.790 |
|---|---|---|---|---|---|
| 15 | AHMAD | 5.535 | 9.327 | 7.342 | 8.890 |
| 16 | BAYU | 7.190 | 9.714 | 5.350 | 5.280 |
| 17 | RISA | 9.155 | 6.476 | 9.115 | 8.504 |
| 18 | RANI | 9.645 | 5.341 | 5.270 | 7.014 |
| 19 | YANI | 7.555 | 8.917 | 8.744 | 5.134 |
| 20 | RATIH | 6.349 | 7.158 | 6.522 | 5.196 |
| 21 | INDAH | 7.759 | 7.823 | 5.473 | 8.542 |
| 22 | JONO | 8.349 | 6.885 | 5.698 | 7.647 |
| 23 | SARAH | 5.259 | 8.390 | 5.055 | 9.378 |
| 24 | RAMA | 5.092 | 6.298 | 5.107 | 6.607 |
| 25 | BAMBANG | 7.710 | 8.635 | 6.575 | 9.642 |
| 26 | HADI | 5.438 | 8.115 | 6.890 | 7.625 |
| 27 | NANA | 5.483 | 5.509 | 8.056 | 6.990 |
| 28 | FEBRI | 6.195 | 8.177 | 5.549 | 5.733 |
| 29 | DENI | 5.264 | 6.093 | 7.129 | 6.851 |
| 30 | TONI | 8.524 | 6.487 | 6.946 | 5.011 |

| Component | Singular Value | Proportion of Singular Values | Cumulative Singular Values | Cumulative Proportion of Sin... |
|---|---|---|---|---|
| SVD 1 | 79.137 | 0.769 | 79.137 | 0.769 |
| SVD 2 | 8.963 | 0.087 | 88.100 | 0.856 |
| SVD 3 | 7.456 | 0.072 | 95.556 | 0.929 |
| SVD 4 | 7.318 | 0.071 | 102.875 | 1.000 |

| Attribute | SVD Vector 1 | SVD Vector 2 | SVD Vector 3 |
|---|---|---|---|
| B.IND | 0.484 | -0.594 | 0.599 |
| B.ING | 0.533 | 0.618 | 0.358 |
| MTK | 0.482 | -0.410 | -0.611 |
| IPA | 0.499 | 0.311 | -0.374 |



Cumulative Proportion of Singular Values

Clustering

Clustering

Clustering

Clustering
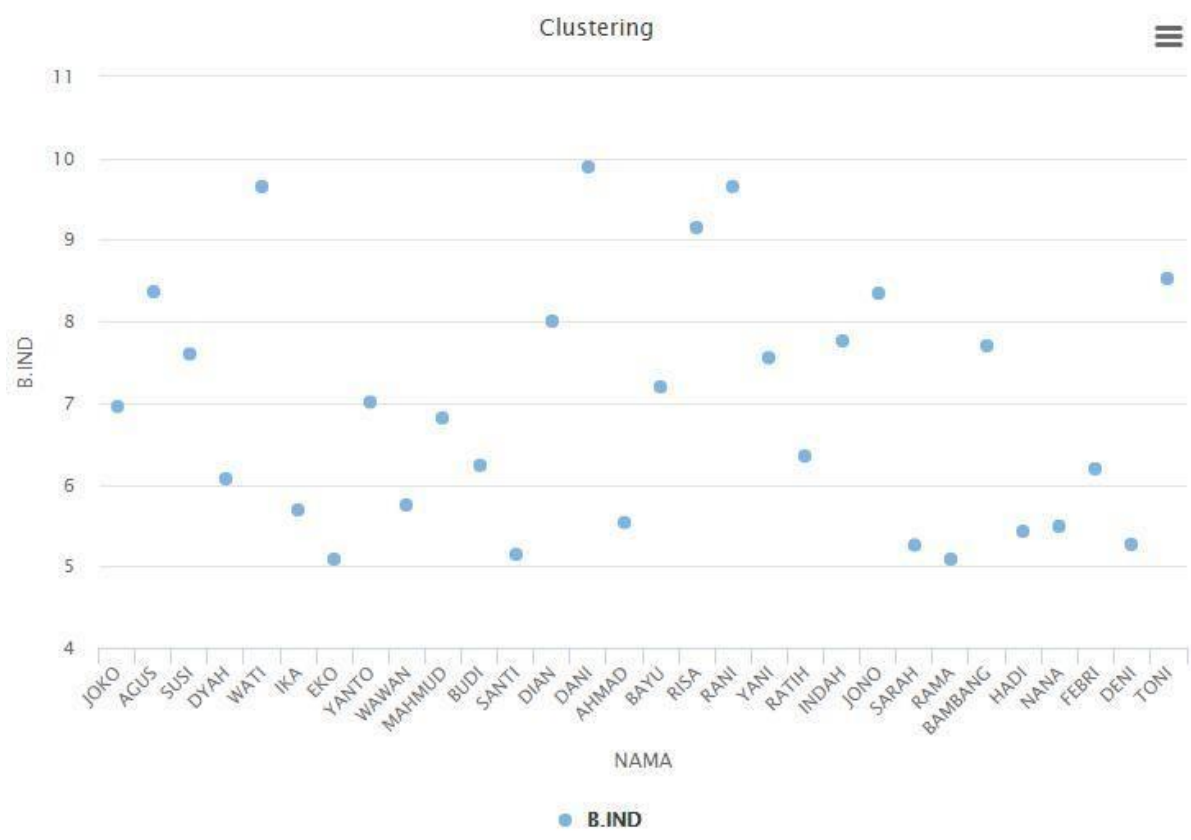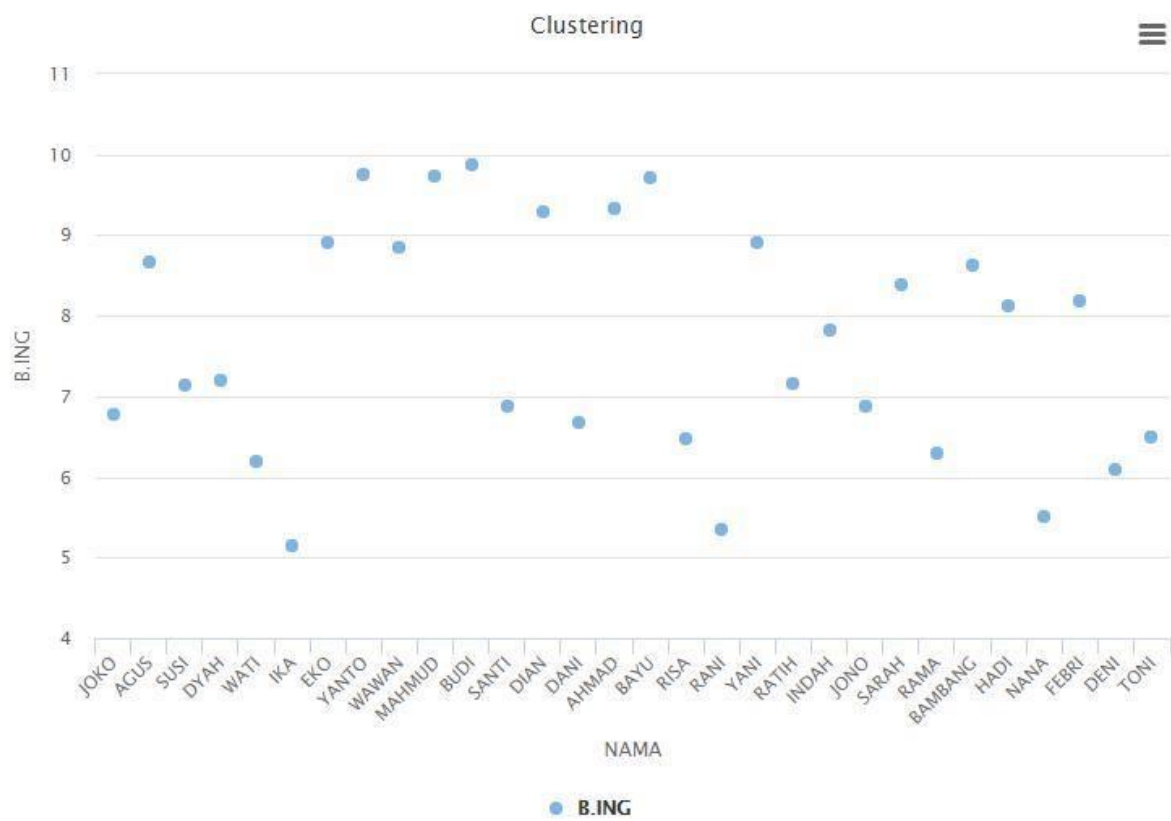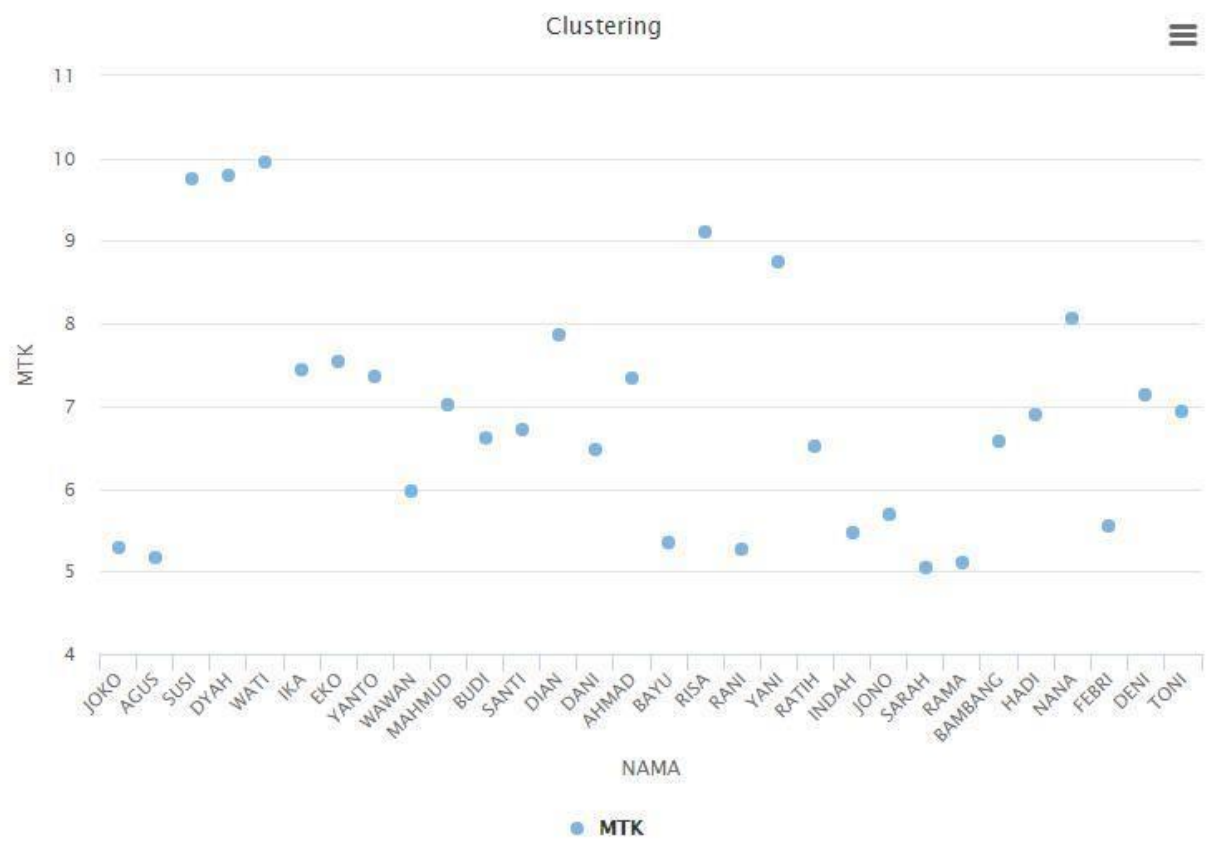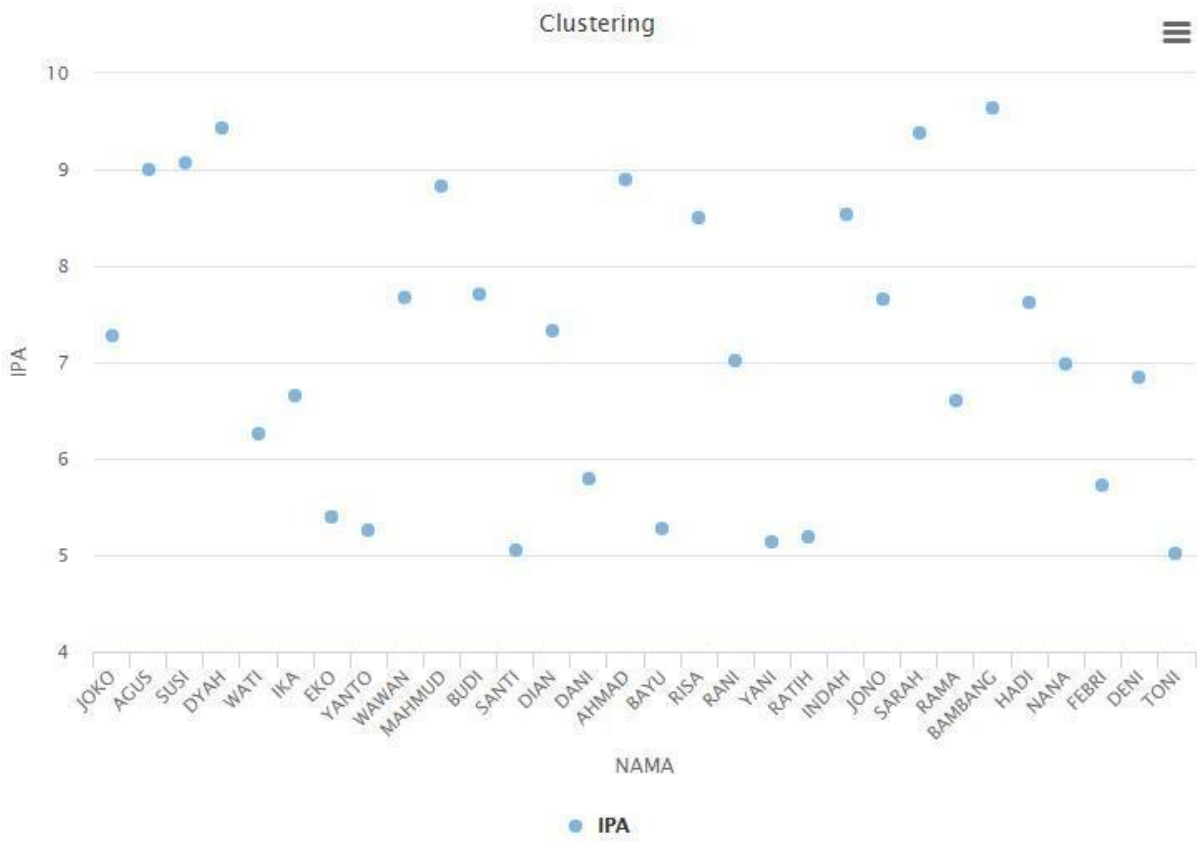
| Row No. | NAMA | cluster ↑ | svd_1 |
|---|---|---|---|
| 1 | JOKO | cluster_0 | 0.166 |
| 6 | IKA | cluster_0 | 0.157 |
| 7 | EKO | cluster_0 | 0.171 |
| 12 | SANTI | cluster_0 | 0.151 |
| 19 | YANI | cluster_0 | 0.192 |
| 20 | RATIH | cluster_0 | 0.160 |
| 24 | RAMA | cluster_0 | 0.146 |
| 27 | NANA | cluster_0 | 0.164 |
| 28 | FEBRI | cluster_0 | 0.163 |
| 29 | DENI | cluster_0 | 0.160 |
| 14 | DANI | cluster_1 | 0.181 |
| 18 | RANI | cluster_1 | 0.171 |
| 22 | JONO | cluster_1 | 0.180 |
| 30 | TONI | cluster_1 | 0.170 |

| | | | |
|---|---|---|---|
| 3 | SUSI | cluster_2 | 0.211 |
| 4 | DYAH | cluster_2 | 0.205 |
| 5 | WATI | cluster_2 | 0.201 |
| 17 | RISA | cluster_2 | 0.209 |
| 2 | AGUS | cluster_3 | 0.198 |
| 8 | YANTO | cluster_3 | 0.187 |
| 9 | WAWAN | cluster_3 | 0.179 |
| 10 | MAHMUD | cluster_3 | 0.206 |
| 11 | BUDI | cluster_3 | 0.194 |
| 13 | DIAN | cluster_3 | 0.206 |
| 15 | AHMAD | cluster_3 | 0.197 |
| 16 | BAYU | cluster_3 | 0.175 |
| 21 | INDAH | cluster_3 | 0.187 |
| 23 | SARAH | cluster_3 | 0.179 |

| | | | |
|---|---|---|---|
| 25 | BAMBANG | cluster_3 | 0.206 |
| 26 | HADI | cluster_3 | 0.178 |

## Cluster Model

```
Cluster 0: 10 items
Cluster 1: 4 items
Cluster 2: 4 items
Cluster 3: 12 items
Total number of items: 30
```