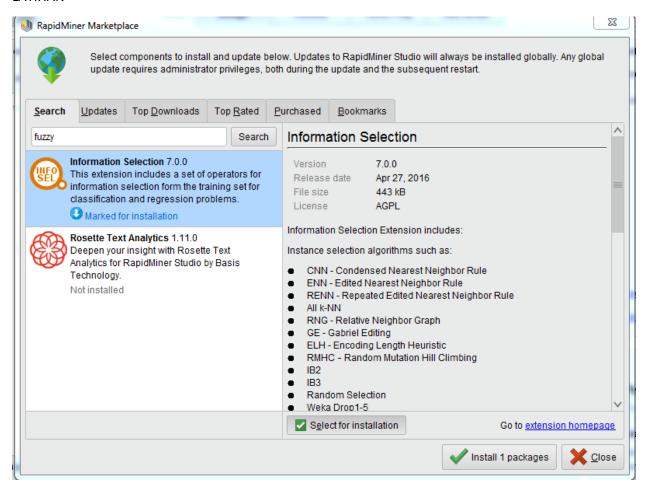
Nama: Nugroho Prihananto

NIM : L200170186

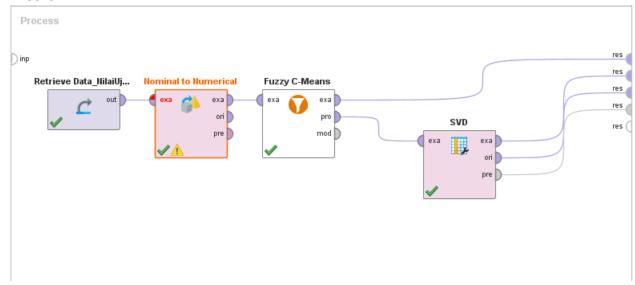
Kelas: F

MODUL 14

LATIHAN



1. PROSES



2. Output (nominal to numerical)

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

3. Output example set (fuzzy c-means)



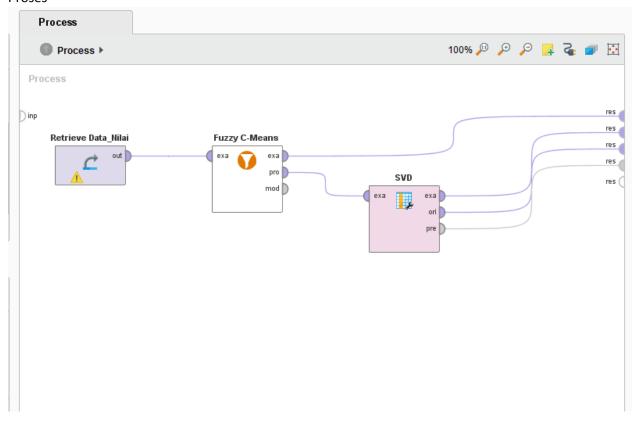
9.164

cluster_2

TUGAS

1. Proses

3



8.139

2. Output example set (fuzzy c-means)

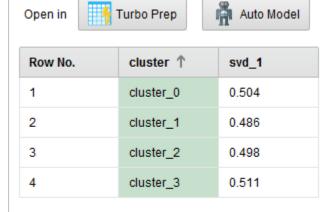


| Row No. | cluster ↑ | B.IND | B.ING | MTK | IPA |
|---------|-----------|-------|-------|-------|-------|
| 1 | cluster_0 | 7.266 | 7.857 | 7.529 | 7.744 |
| 2 | cluster_1 | 7.473 | 7.590 | 7.238 | 7.082 |
| 3 | cluster_2 | 7.344 | 7.783 | 7.272 | 7.683 |
| 4 | cluster_3 | 7.212 | 8.223 | 7.437 | 7.974 |

3. Svd

| Component | Singular Value | Proportion of Singular Values | Cumulative Singular Values | Cumulative Proportion of Si |
|-----------|----------------|-------------------------------|----------------------------|-----------------------------|
| SVD 1 | 30.194 | 0.969 | 30.194 | 0.969 |
| SVD 2 | 0.620 | 0.020 | 30.814 | 0.989 |
| SVD 3 | 0.187 | 0.006 | 31.001 | 0.995 |
| SVD 4 | 0.152 | 0.005 | 31.153 | 1.000 |

4. Example set (svd)



5. Example set (retrieve data_nilai)

| Row No. | NAMA | cluster ↑ | B.IND | B.ING | МТК | IPA |
|---------|---------|-----------|-------|-------|-------|-------|
| 6 | IKA | cluster_0 | 6.084 | 7.092 | 8.442 | 7.743 |
| 10 | MAHMUD | cluster_0 | 9.837 | 7.466 | 8.470 | 8.059 |
| 13 | DIAN | cluster_0 | 5.361 | 6.401 | 9.002 | 9.461 |
| 19 | YANI | cluster_0 | 7.140 | 6.903 | 9.779 | 8.558 |
| 26 | HADI | cluster_0 | 8.156 | 6.717 | 8.880 | 8.619 |
| 27 | NANA | cluster_0 | 5.000 | 6.659 | 8.504 | 7.398 |
| 1 | JOKO | cluster_1 | 7.733 | 5.408 | 9.792 | 5.090 |
| 4 | DYAH | cluster_1 | 6.260 | 7.349 | 8.101 | 5.432 |
| 8 | YANTO | cluster_1 | 9.678 | 5.671 | 6.550 | 6.058 |
| 15 | AHMAD | cluster_1 | 7.193 | 8.851 | 8.930 | 5.620 |
| 16 | BAYU | cluster_1 | 7.022 | 9.795 | 7.451 | 5.838 |
| 17 | RISA | cluster_1 | 7.777 | 5.778 | 7.030 | 7.526 |
| 18 | RANI | cluster_1 | 5.610 | 7.456 | 5.325 | 5.522 |
| 22 | JONO | cluster_1 | 5.913 | 8.835 | 6.883 | 6.220 |
| 23 | SARAH | cluster_1 | 5.775 | 5.816 | 8.528 | 5.547 |
| 24 | RAMA | cluster_1 | 8.531 | 6.496 | 5.588 | 5.932 |
| 3 | SUSI | cluster_2 | 6.984 | 7.031 | 5.477 | 8.220 |
| 5 | WATI | cluster_2 | 8.208 | 8.908 | 6.312 | 7.269 |
| 9 | WAWAN | cluster_2 | 8.753 | 8.251 | 6.896 | 7.635 |
| 14 | DANI | cluster_2 | 8.193 | 5.862 | 6.144 | 8.659 |
| 25 | BAMBANG | cluster_2 | 5.347 | 6.226 | 5.458 | 7.640 |
| 2 | AGUS | cluster_3 | 7.391 | 9.346 | 8.235 | 8.299 |
| 7 | EKO | cluster_3 | 9.504 | 9.181 | 5.704 | 8.914 |
| 11 | BUDI | cluster_3 | 5.032 | 9.995 | 5.100 | 9.623 |
| 12 | SANTI | cluster_3 | 6.022 | 8.995 | 5.100 | 8.767 |
| 20 | RATIH | cluster_3 | 8.936 | 9.551 | 6.656 | 7.745 |
| 21 | INDAH | cluster_3 | 8.902 | 9.947 | 9.025 | 8.071 |
| 28 | FABRI | cluster_3 | 8.650 | 9.937 | 9.874 | 9.424 |
| 29 | DENI | cluster_3 | 6.212 | 9.951 | 7.788 | 9.726 |
| 30 | TONI | cluster_3 | 8.520 | 9.942 | 5.981 | 9.900 |