**LAPORAN PRAKTIKUM   
DATA WAREHOUSING DAN DATA MINING**

**PERTEMUAN 9**

**“CLUSTERING : K-MEANS”**



**Oleh:**

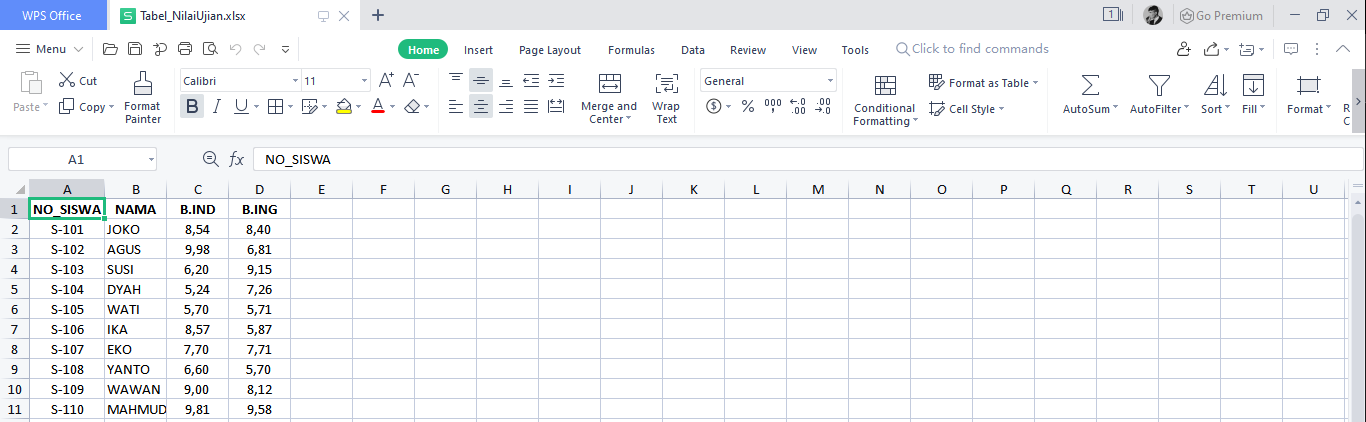
**NAMA : Daffa Putra Alwansyah   
 NIM : L200190031**

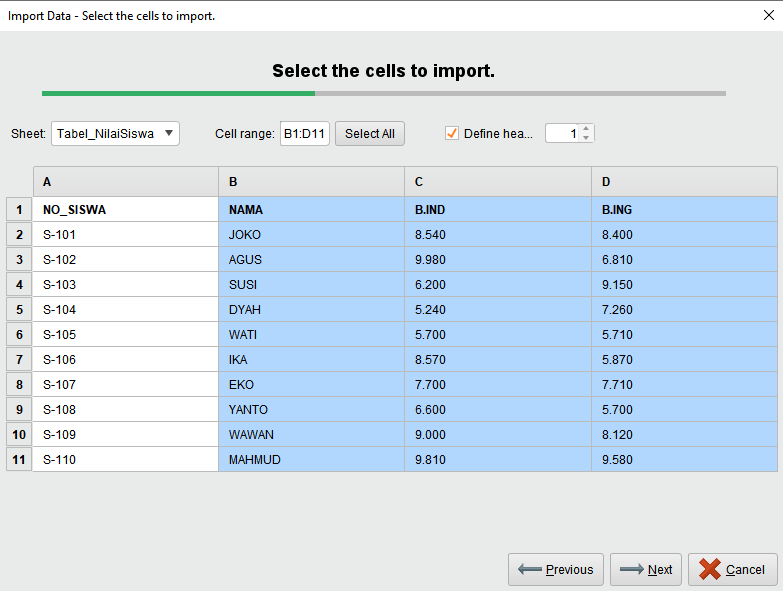
**KELAS : B**

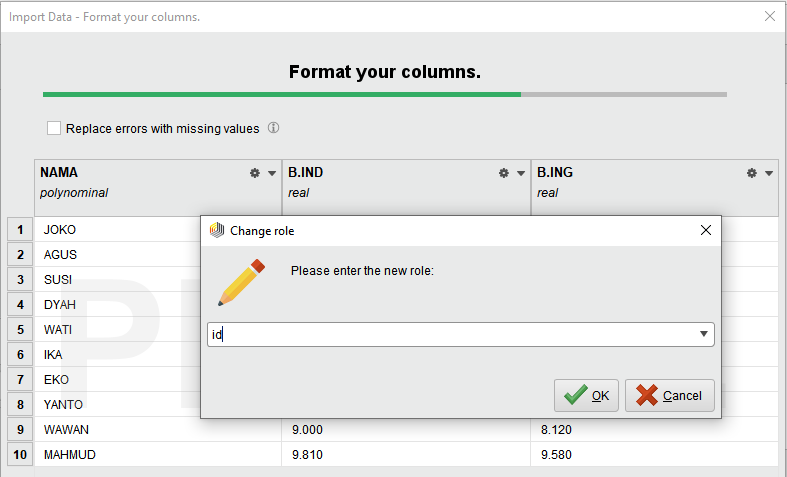
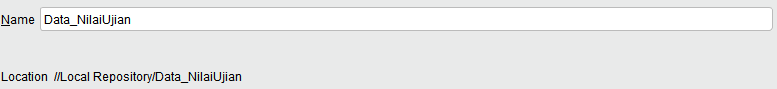
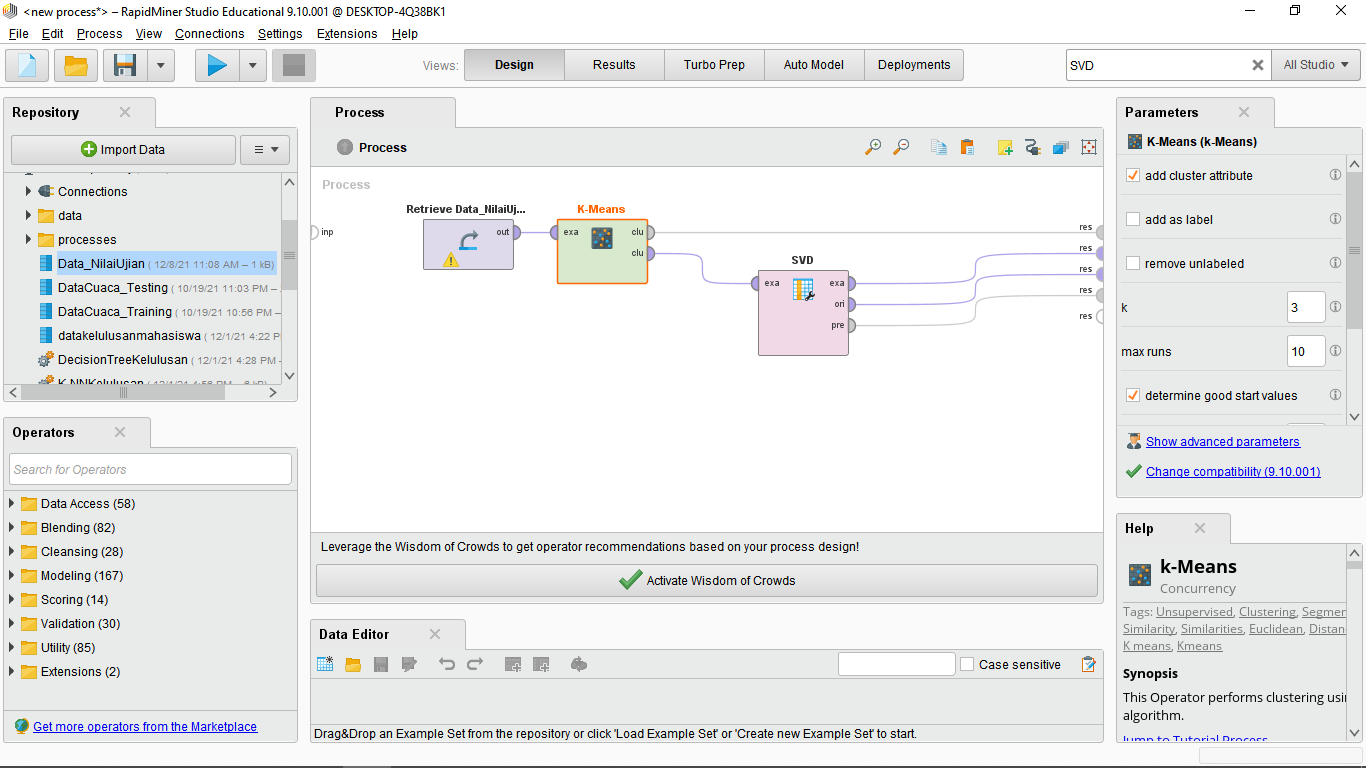
**PRODI : INFORMATIKA**

**Fakultas Komunikasi dan Informatika   
Universitas Muhammadiyah Surakarta**

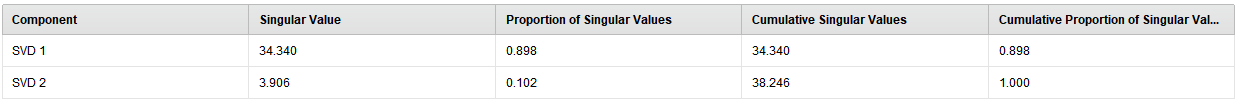
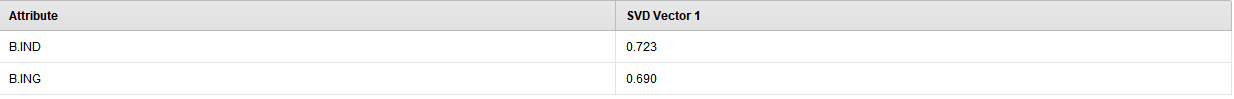
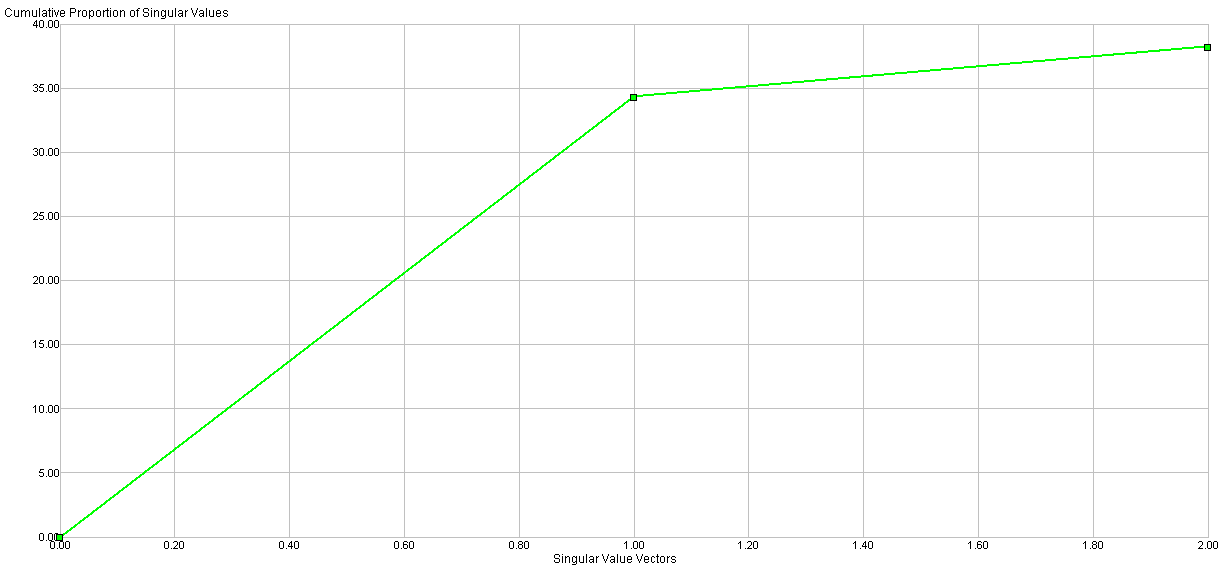
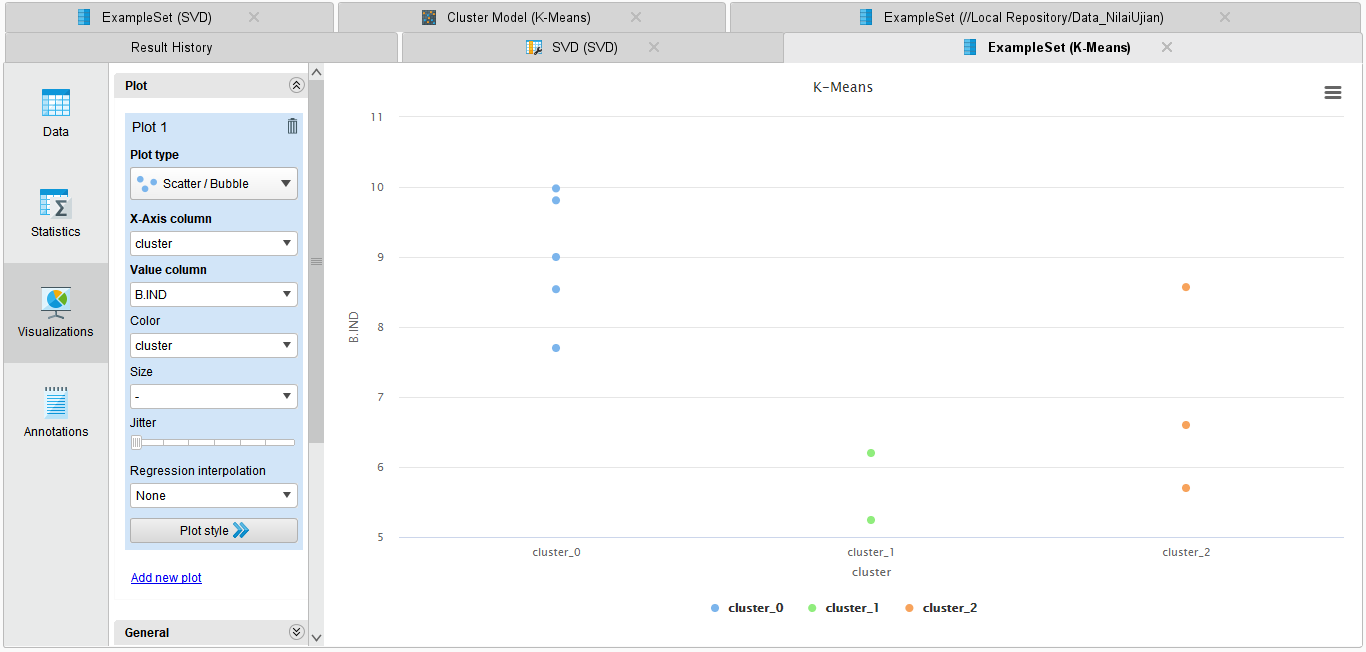
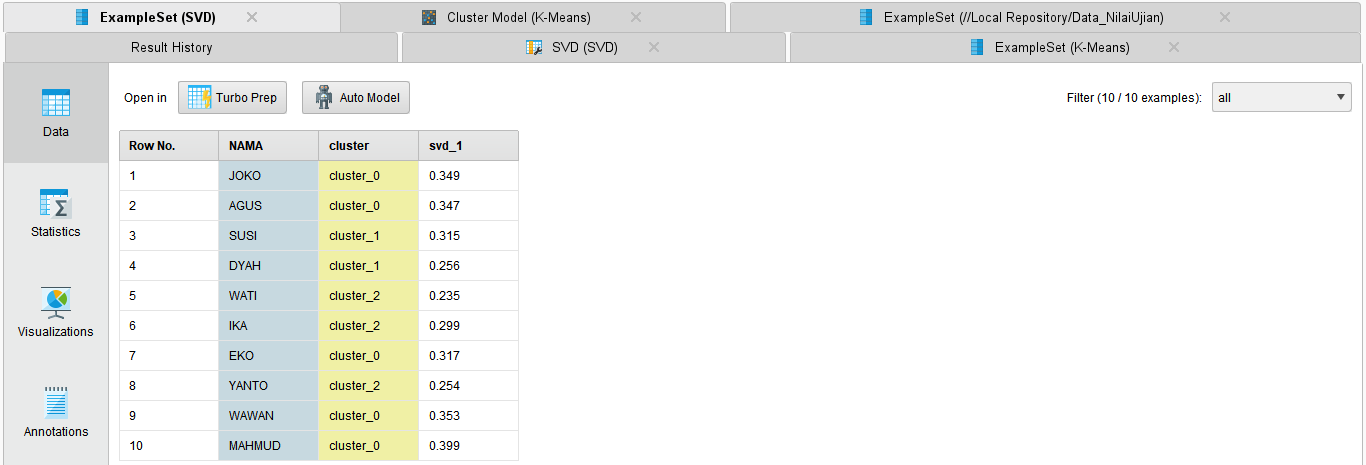
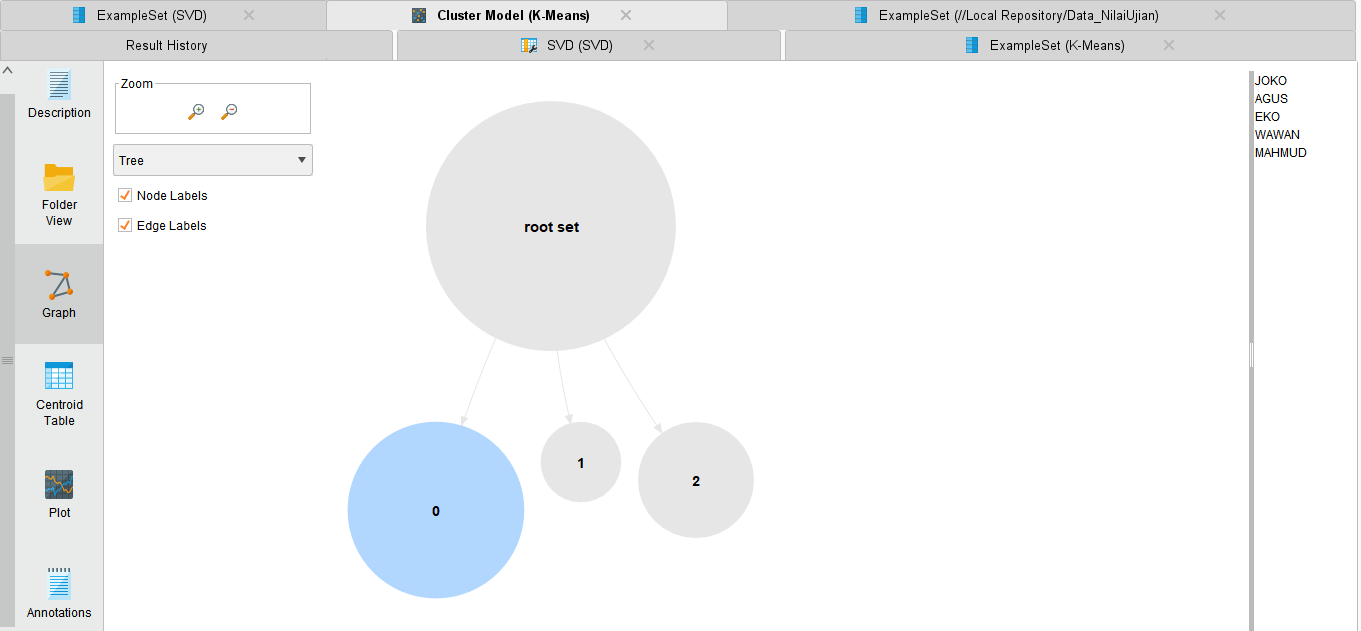
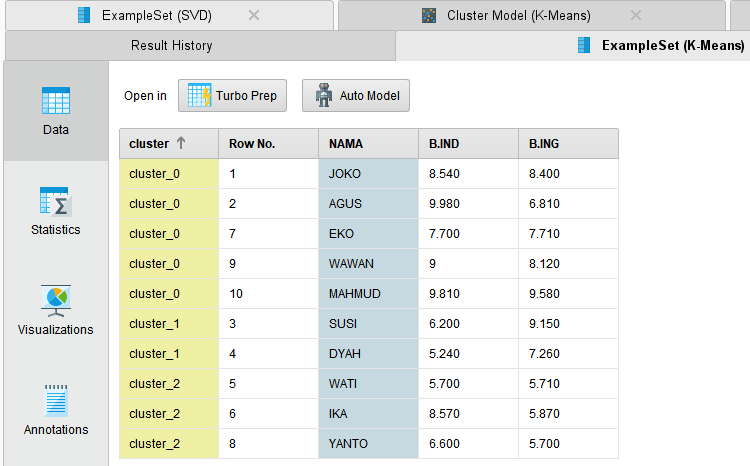
**10.4 Langkah-Langkah Praktikum**1. Membuat Tabel\_NilaiUjian

  
2. Seleksi tiga saja, yaitu Nama, B.IND, dan B.ING

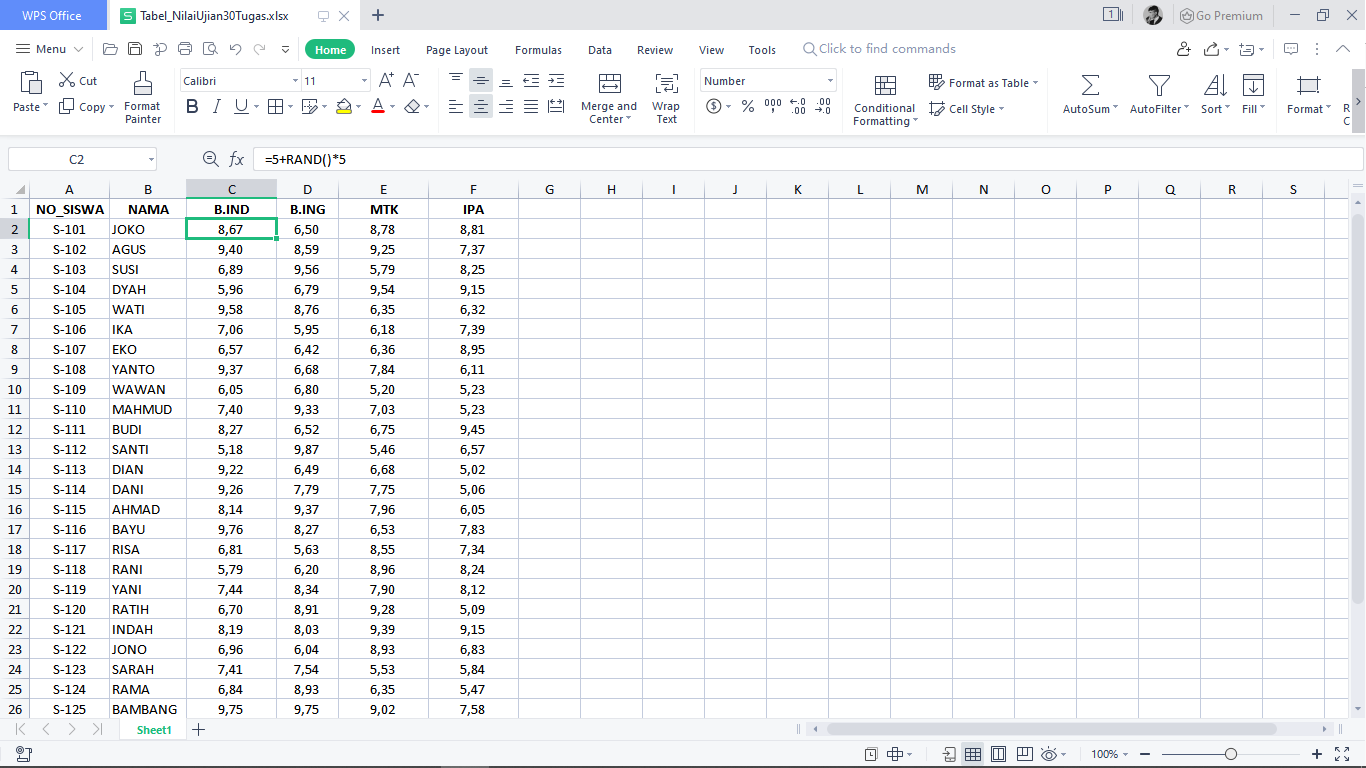
  
3. Ubah role Nama menjadi id.

  
  
  
  
4. Ubah menjadi Data\_NilaiUjian  
  
5. Masukan Data\_NilaiUjian, K-Means (ubah K = 3), dan SVD, setelah itu sambungkan ke port-port sesuai modul, lalu klik tombol run/f11.  


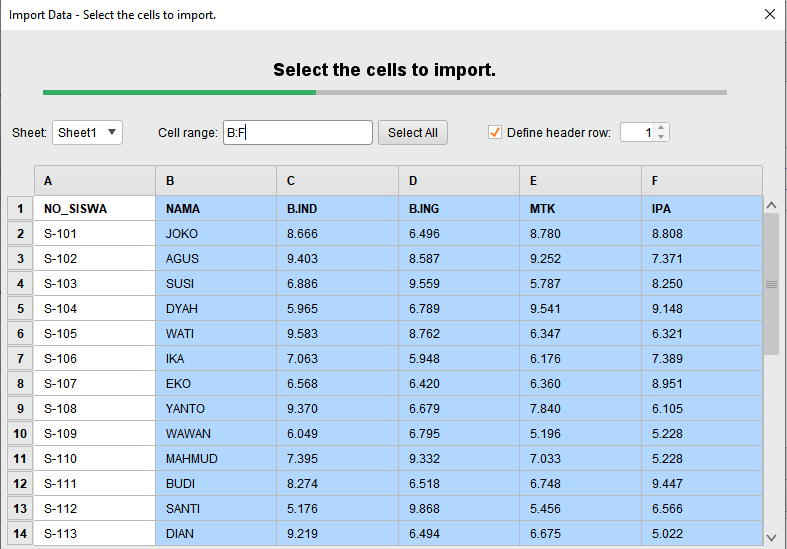
* Berikut adalah hasil proses Clustering dengan algoritma K-Means:

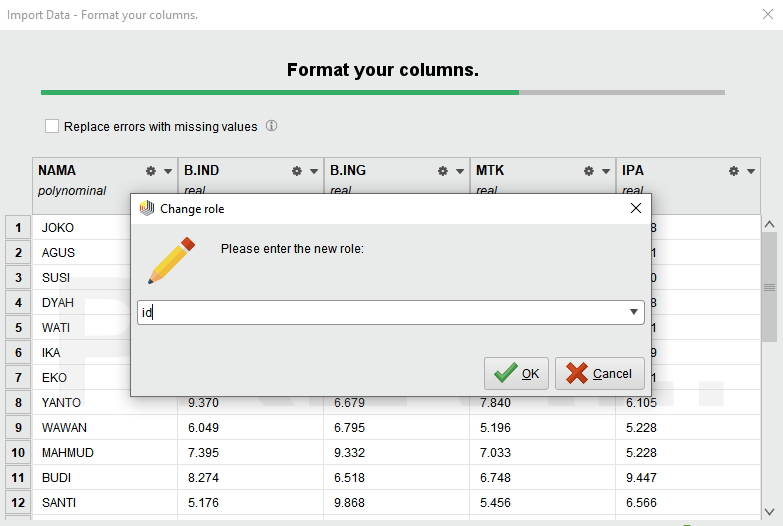
1. SVD (Singular Value Decomposition)
2. Nilai Eigenvalue  
   
3. Nilai vsd Vectors  
   
4. Nilai Cumulative Variance  
   
5. ExampleSet (k-Means)
6. Kelompok siswa bidang B. Indonesia.  
   
7. Kelompok siswa bidang B. Inggris  
   
8. ExampleSet(SVD)  
   
9. Cluster Model (Clustering)
10. Description  
    
11. Graph  
    
12. Hasil Algoritma K-Means  
    

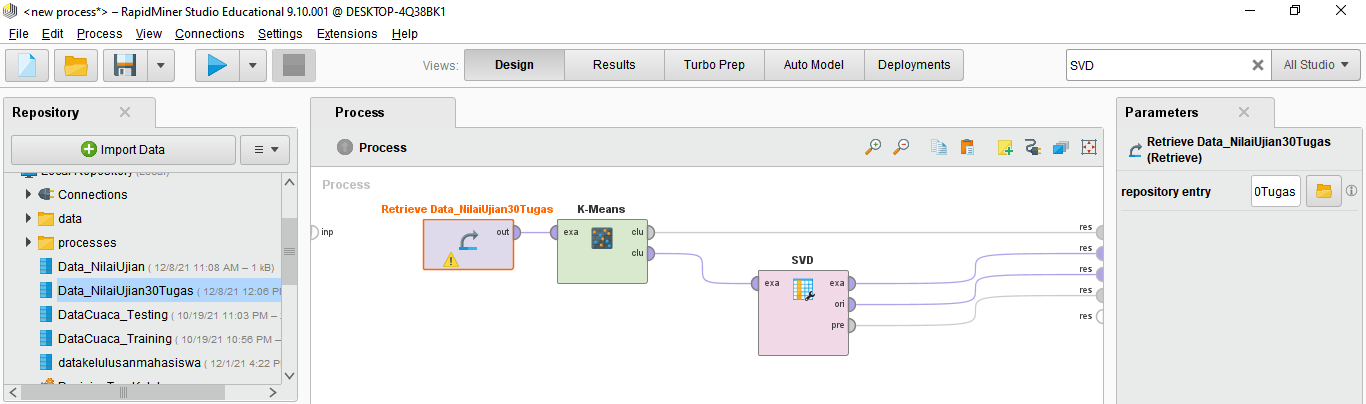
**TUGAS**

1. Membuat tabel Excel 30 Siswa dengan 4 mata pelajaran, pada setiap pelajaran dikasih nilai dengan rumus **=5+RAND()\*5**.  


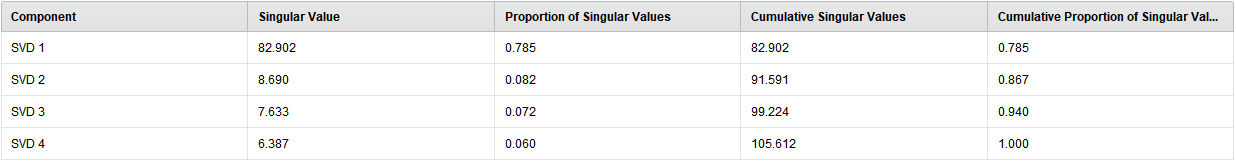
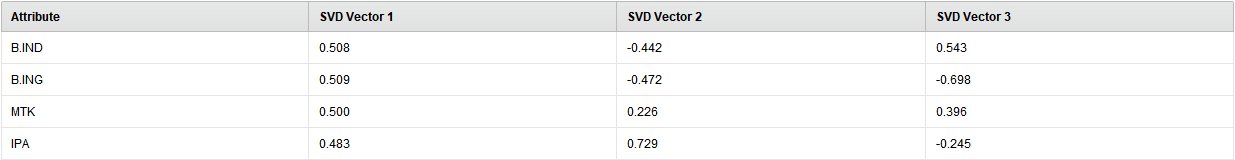
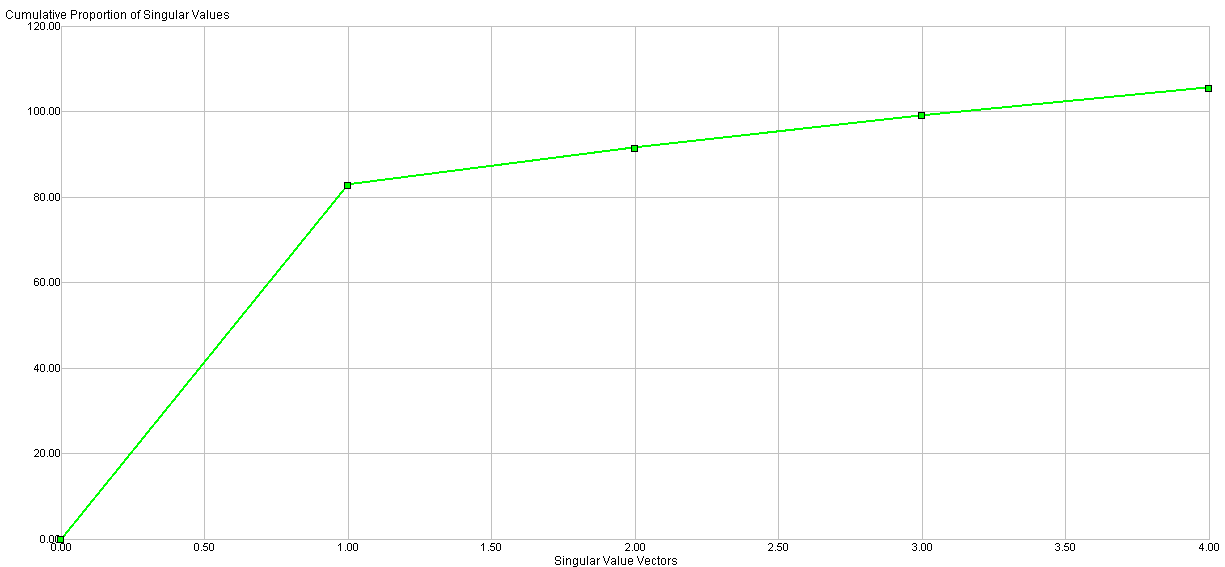
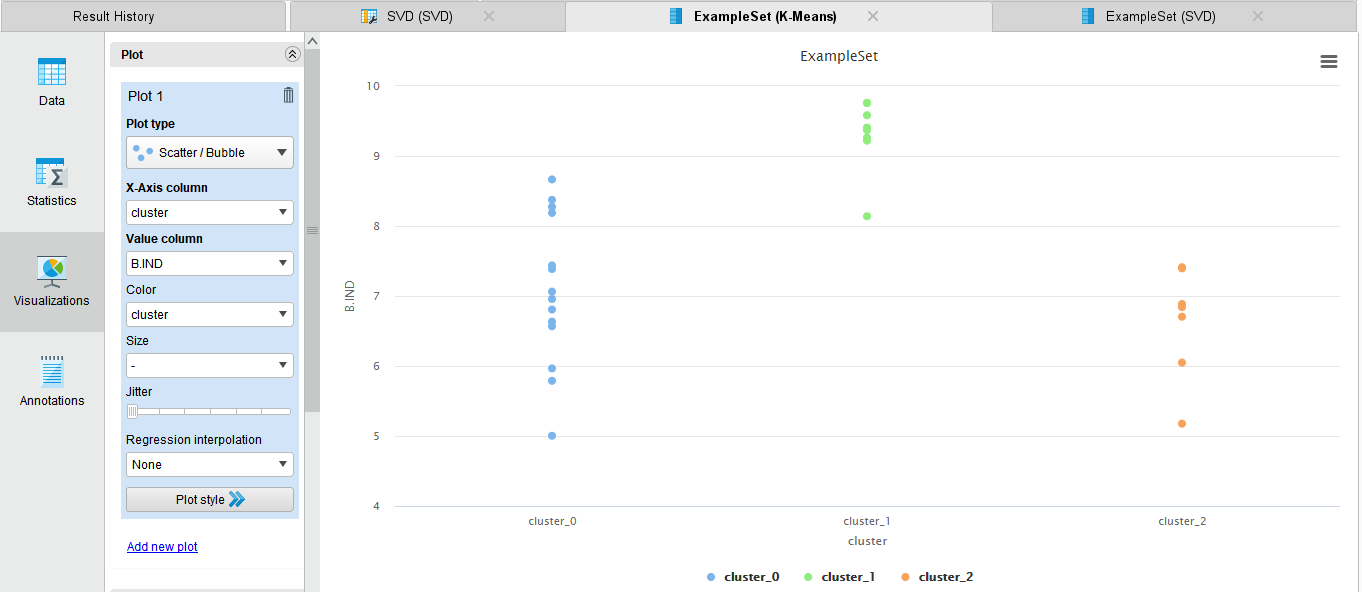
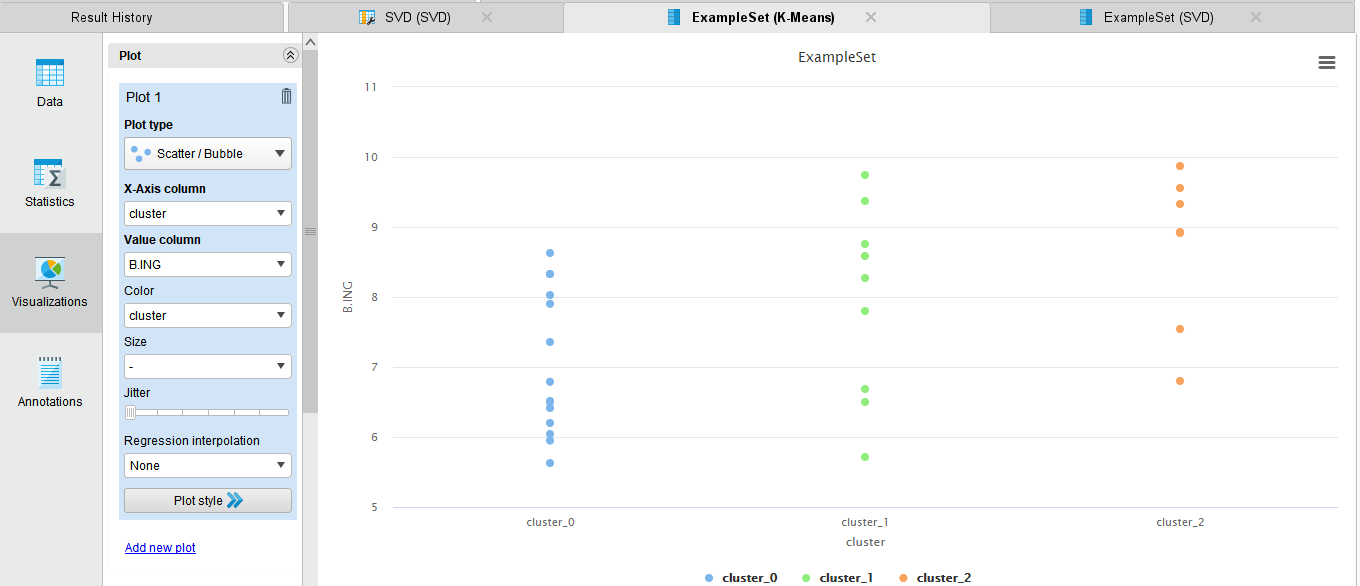
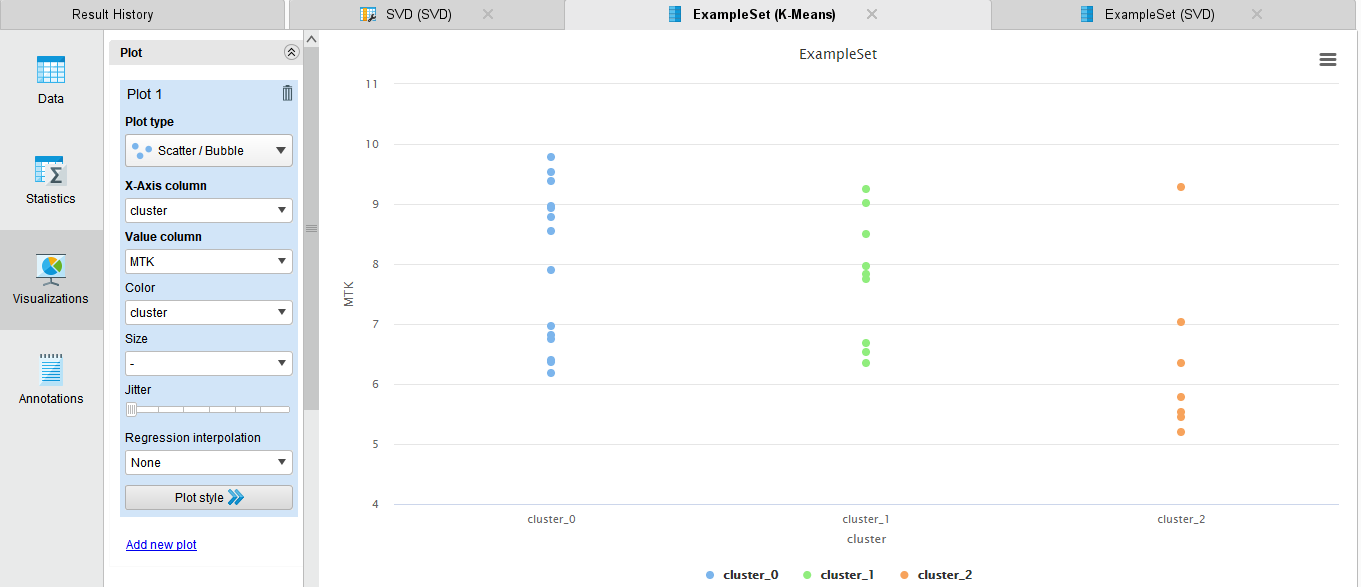
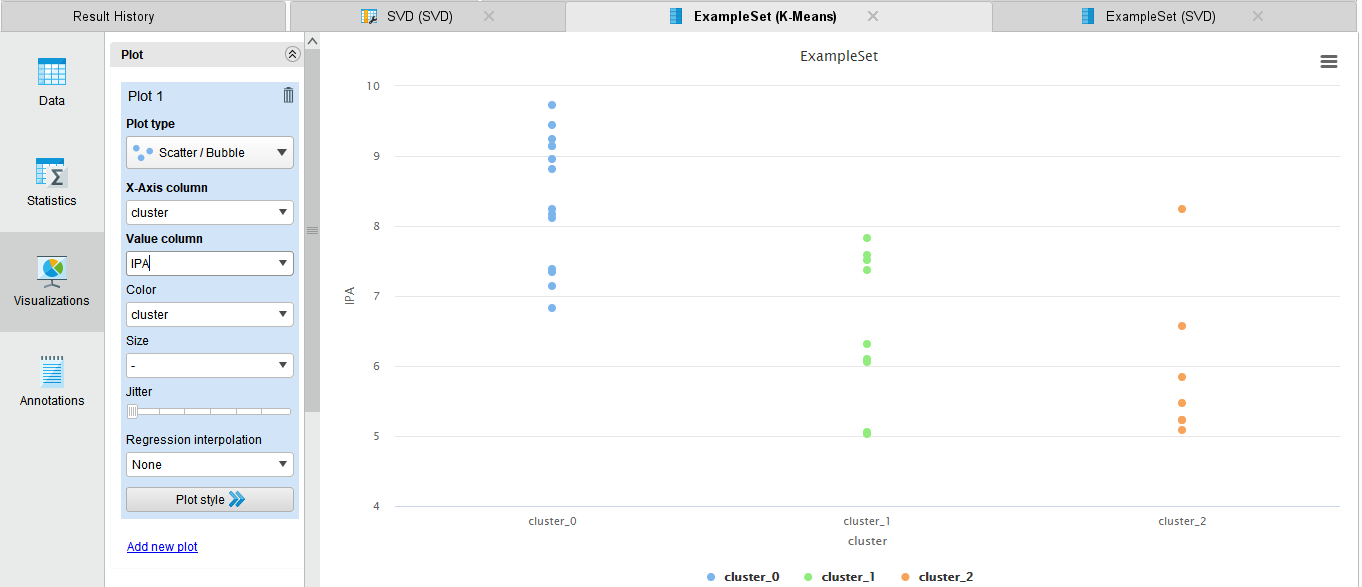
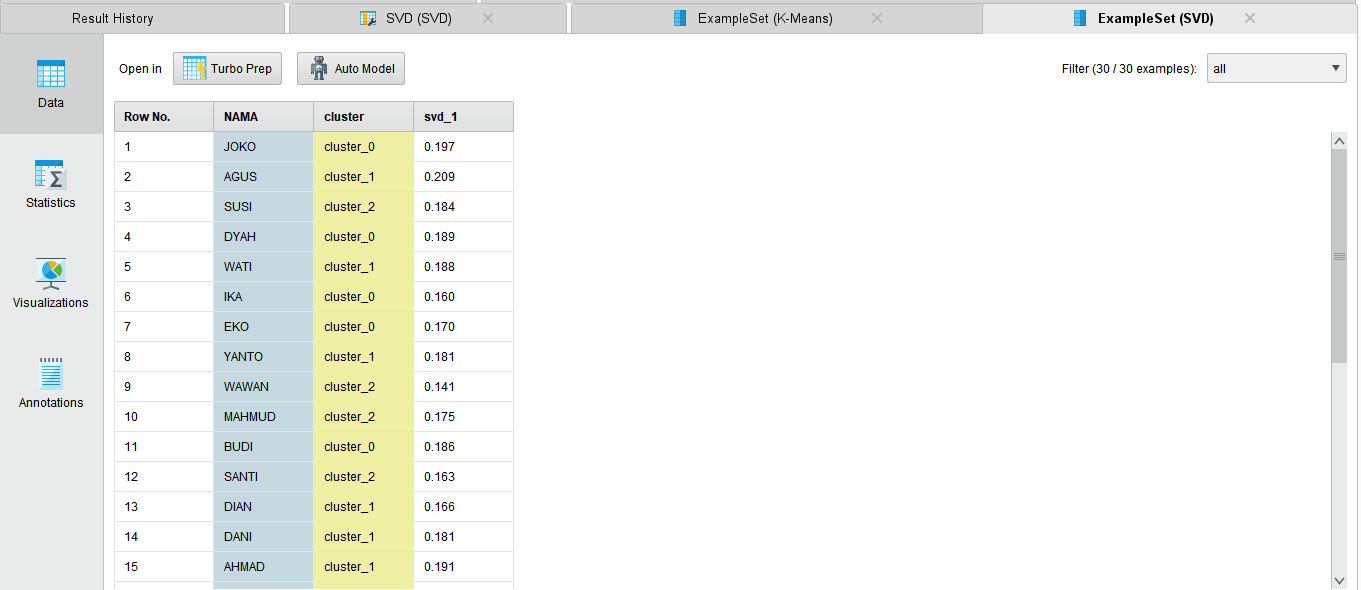
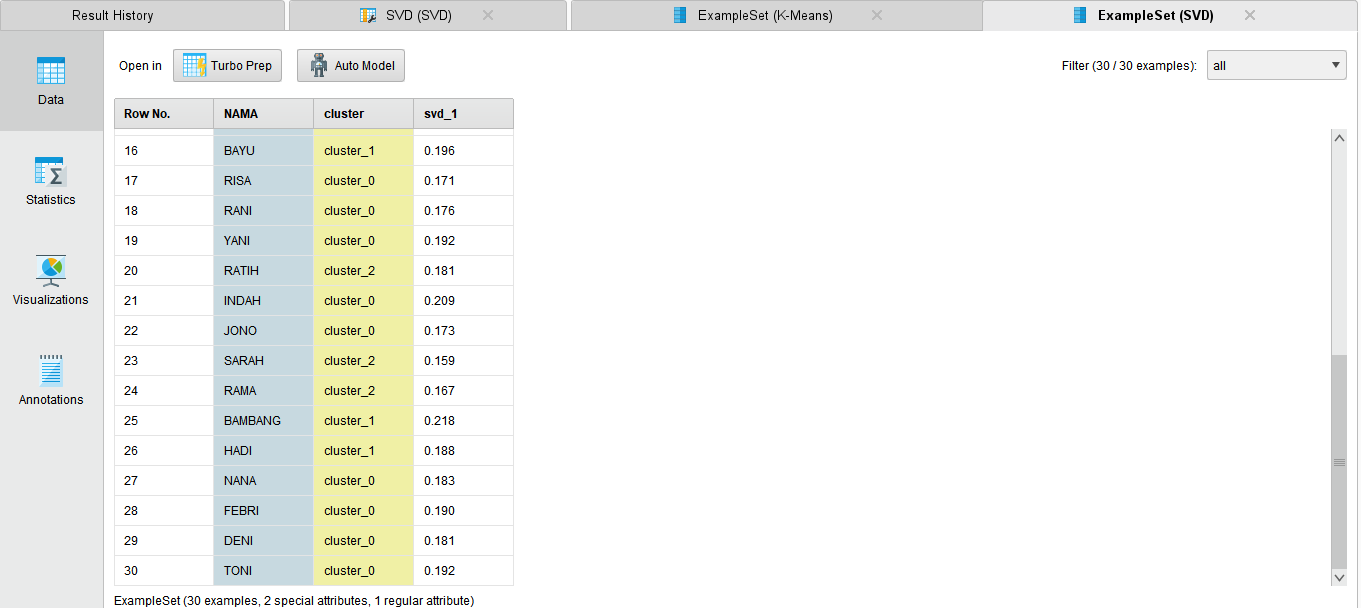
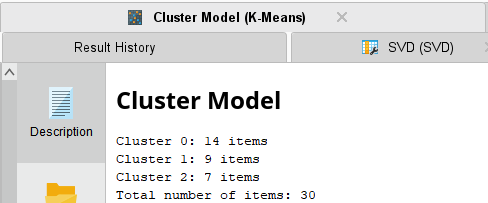
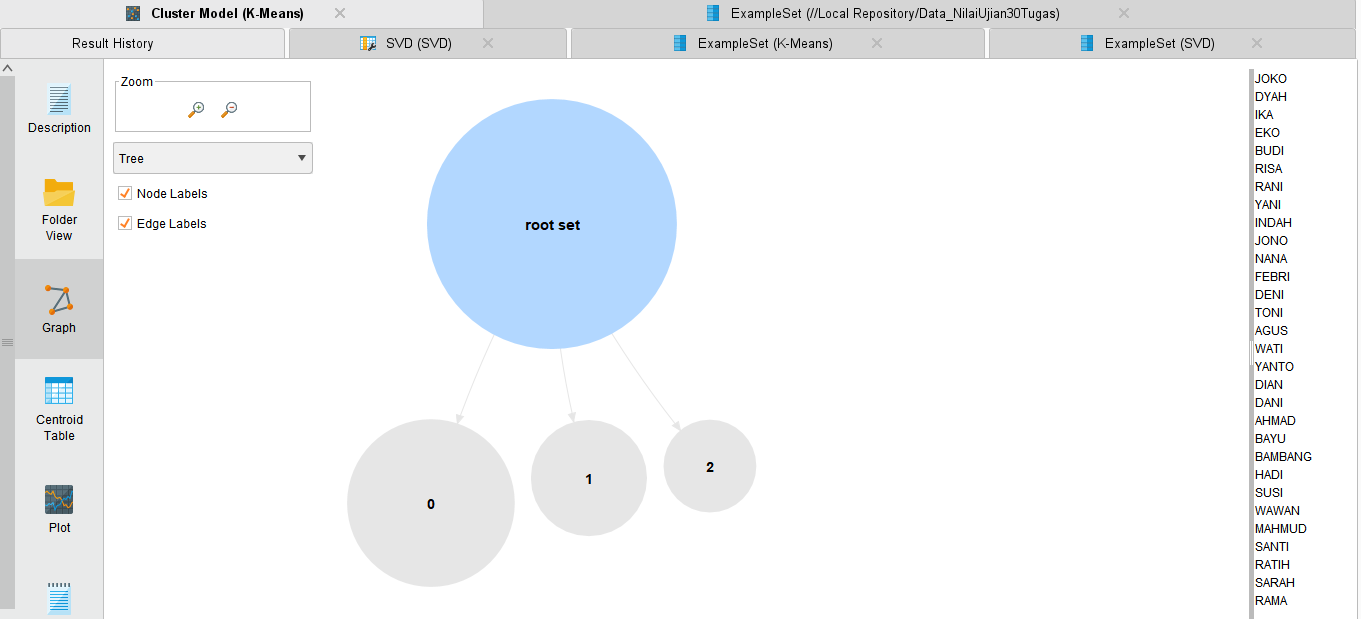
2. Seleksi hanya tiga bagian saja kecuali NO\_SISWA.



1. Ubah role nama mejadi id.  
   
2. Simpan dengan Data\_NilaiUjian30Tugas  
     
   5. Masukan operator Data\_NilaiUjian30Tugas, K-Means, dan SVD, lalu sambungkan

tiap port.  


* Berikut adalah hasil proses Clustering dengan algoritma K-Means:

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7. Kelompok siswa bidang B. Inggris  
   
8. Kelompok siswa bidang MTK  
   
9. Kelompok siswa bidang IPA  
   
10. ExampleSet(SVD)  
      
    
11. Cluster Model (Clustering)
12. Description  
    
13. Graph  
    
14. Hasil Algoritma K-Means  
    