1. **DENSITY PEAKS**
a) Program from scratch the density peaks algorithm
b) Download the data set Aggregation from http://cs.uef.fi/sipu/datasets/
c) Apply the algorithm with d_c=2.5
d) Apply the algorithm to the S3 data set with d_c=57500.
2. **VALIDATION**
a) Apply k-means to the Aggregation data set.
b) Compare the F-ratio variance test of density peaks and k-means for the Aggregation Data set and for S3 data set.
c) Compare the Normalized mutual information scores for the two algorithms (k-means and density peaks) and the two data sets (Aggregation and S3).