Project 4 – Supplement Document

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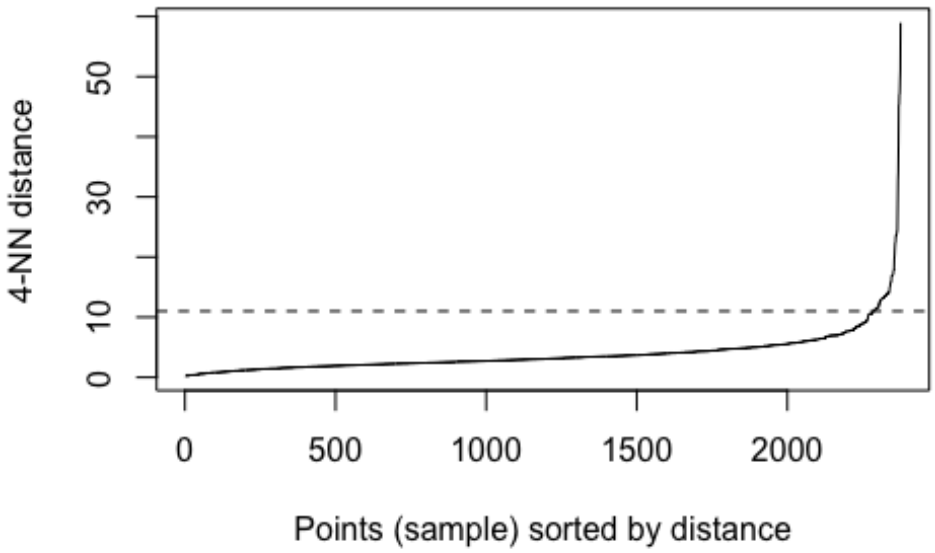
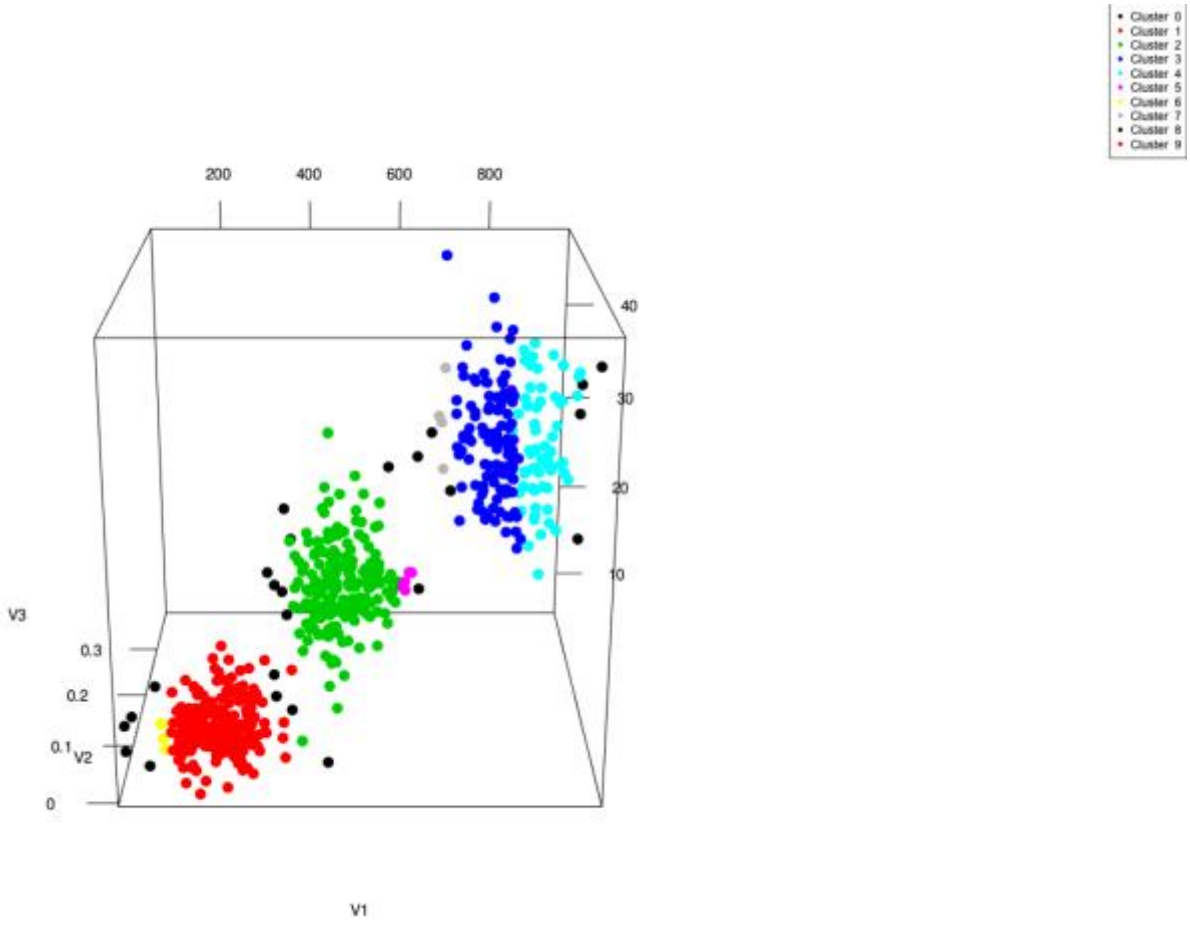
Part 3.2:

Minpts = 4

The kNN distance plot for Ɛ:



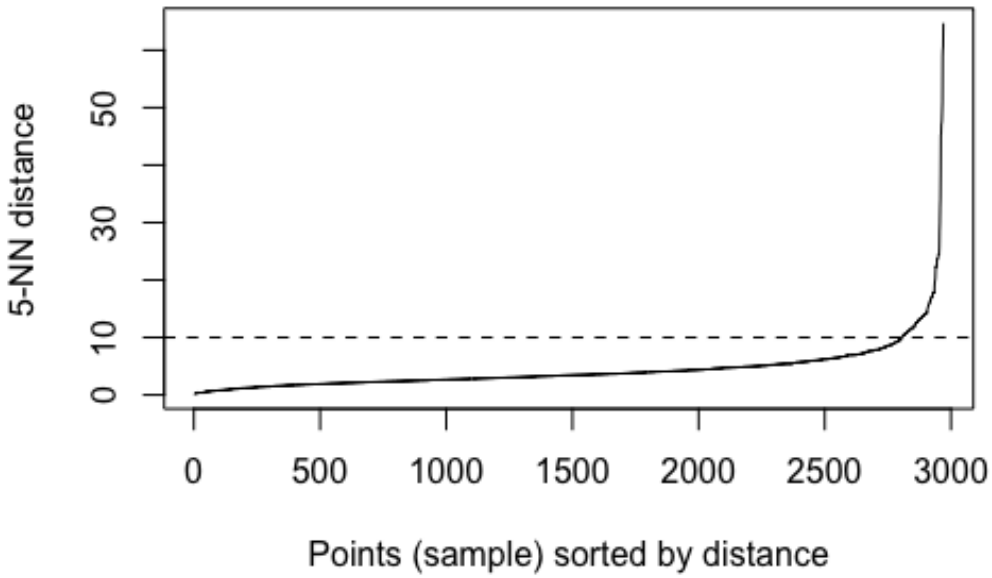
The Ɛ comes out to be 11 in this case after carefully observing the kNN plot.



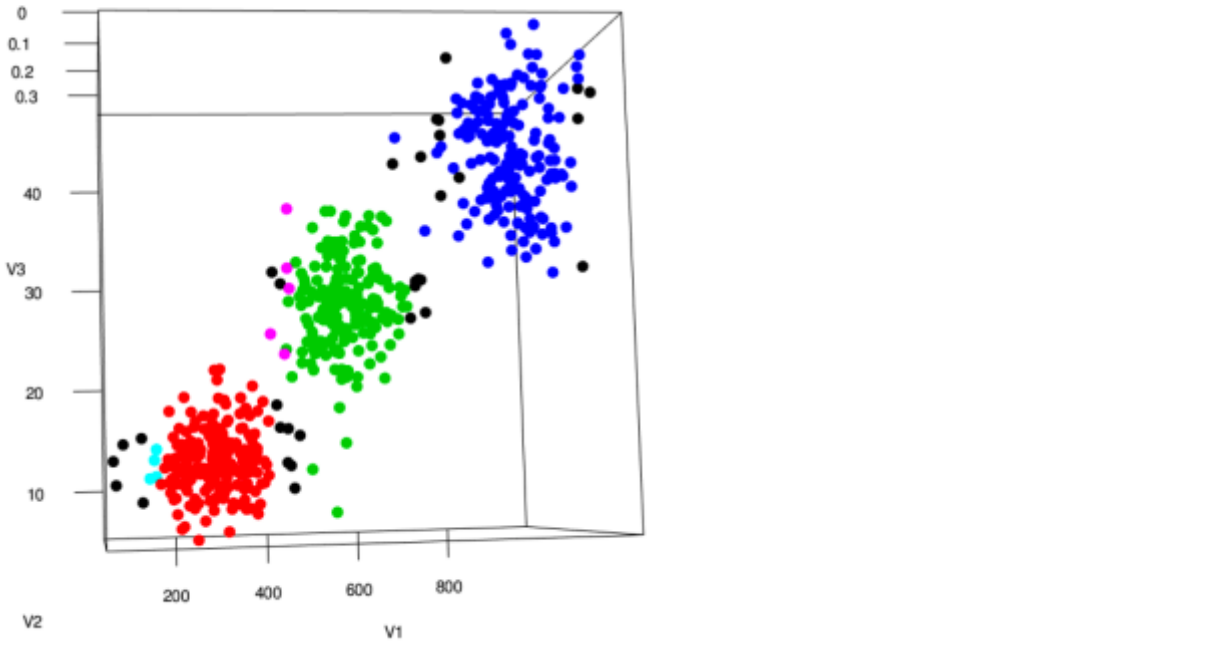
There are over 10 cluster created in this method, this doesn't look like an efficient minimum point for the clustering.

Minpts = 5

The kNN distance plot for Ɛ:



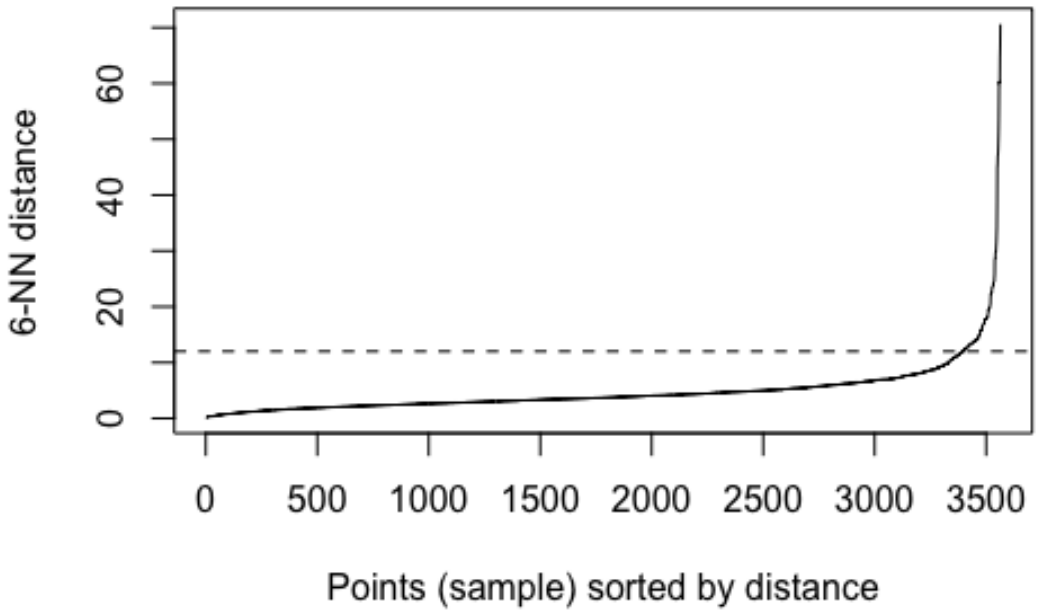
The Ɛ comes out to be 10 in this case after carefully observing the kNN plot.



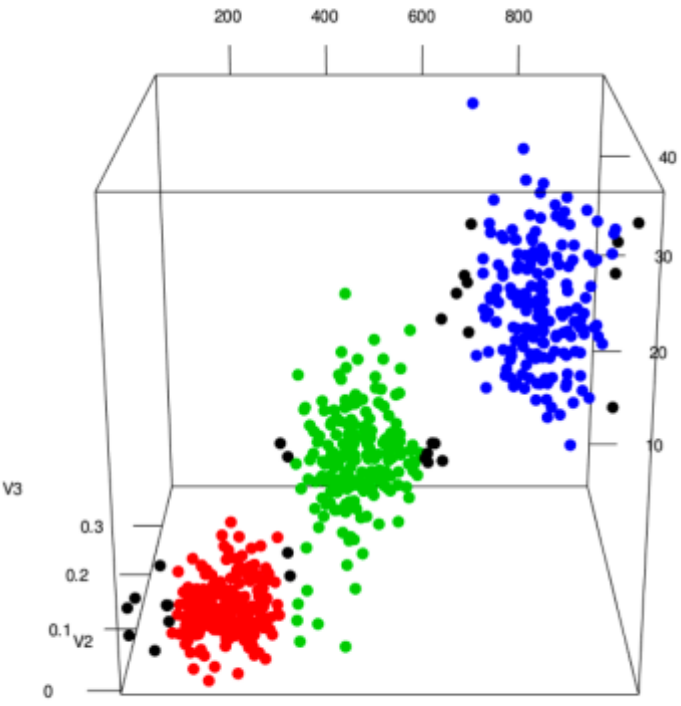
The number of cluster size have decreased in this method and equal to 6 including the outliers cluster.

Minpts = 6

The kNN distance plot for ε:

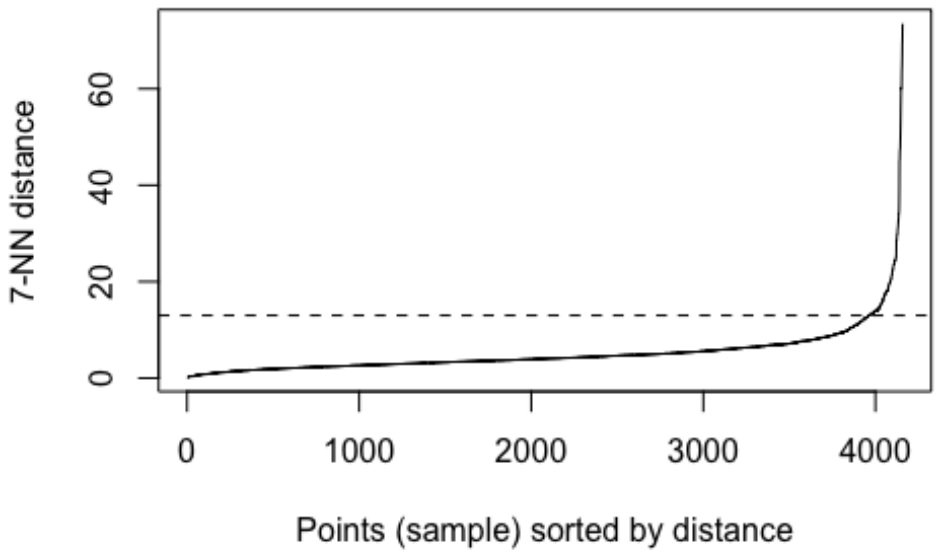


The ε comes out to be 12 in this case after carefully observing the kNN plot.

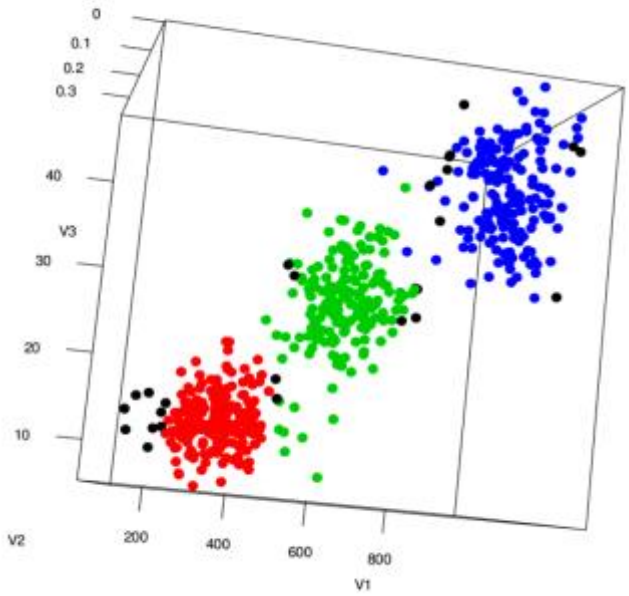


This plot contains 3 clusters which seems correct on observing the data plots and it also contains some outliers marked with black color.

Minpts = 7
The kNN distance plot for ε:



The Ɛ comes out to be 13 in this case after carefully observing the kNN plot.



This plot contains 3 clusters which seems correct on observing the data plots and it also contains some outliers marked with black color. The outliers are little lesser than the 6NN plot.