**Clustering Assignment:**

Attached is the credit card transaction data set for a sample of 1000 customers across various transaction attributes. This is very similar to what you will expect in the industry.

Here are your tasks:

1. Perform K-Means clustering (4)

2. Perform Elbow curve analysis to determine number of optimal clusters

3. Silhoutte Index is another measure to determine optimal number of clusters.

Silhoutte Index wiki:  
[https://en.wikipedia.org/wiki/Silhouette\_(clustering)](https://en.wikipedia.org/wiki/Silhouette_%28clustering%29)

Python implementation:  
  
[http://www.awesomestats.in/python-cluster-validation/](http://www.awesomestats.in/python-cluster-validation/" \t "_blank)

Perform silhoutte index analysis on this data set & find out optimal number of clusters