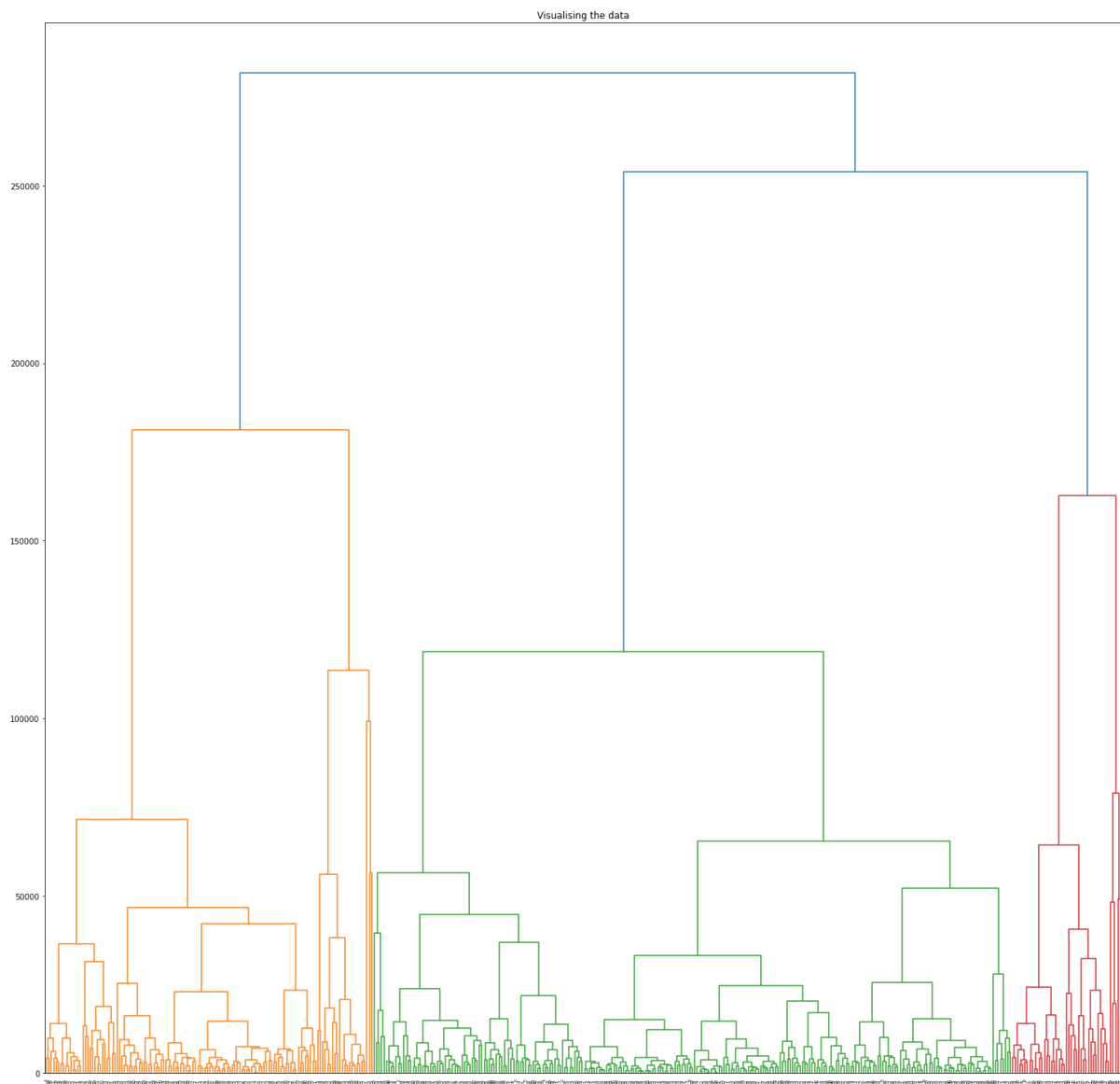


Govardhan Seshasayee

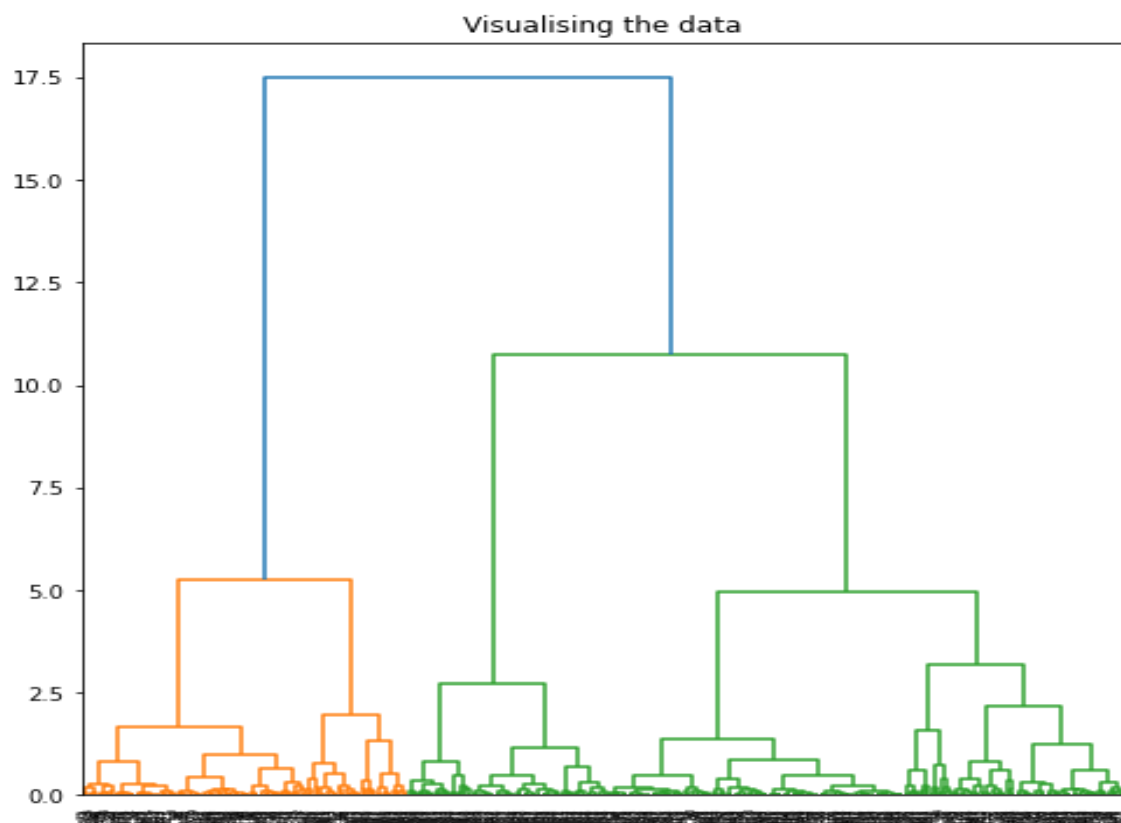
## Construction of hashing tree using hierarchical K-Means

**Hierarchical K-Means: Construction of Hashing Tree** Hierarchical clustering is the hierarchical decomposition of the data based on group similarities. It allows us to build tree structures from data similarities and see how different subclusters relate to each other, and how far apart data points are. It gives us a tree-type structure based on the hierarchical series of nested clusters. A diagram called Dendrogram graphically represents this hierarchy and is an inverted tree that describes the order in which factors are merged, or clusters are broken apart.

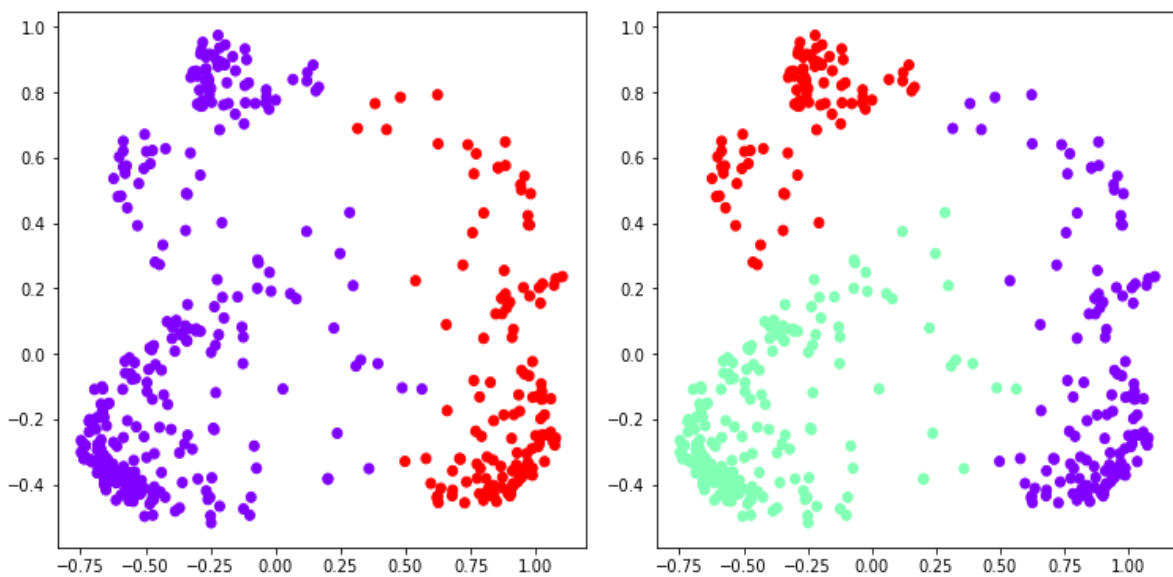
Data visualization:

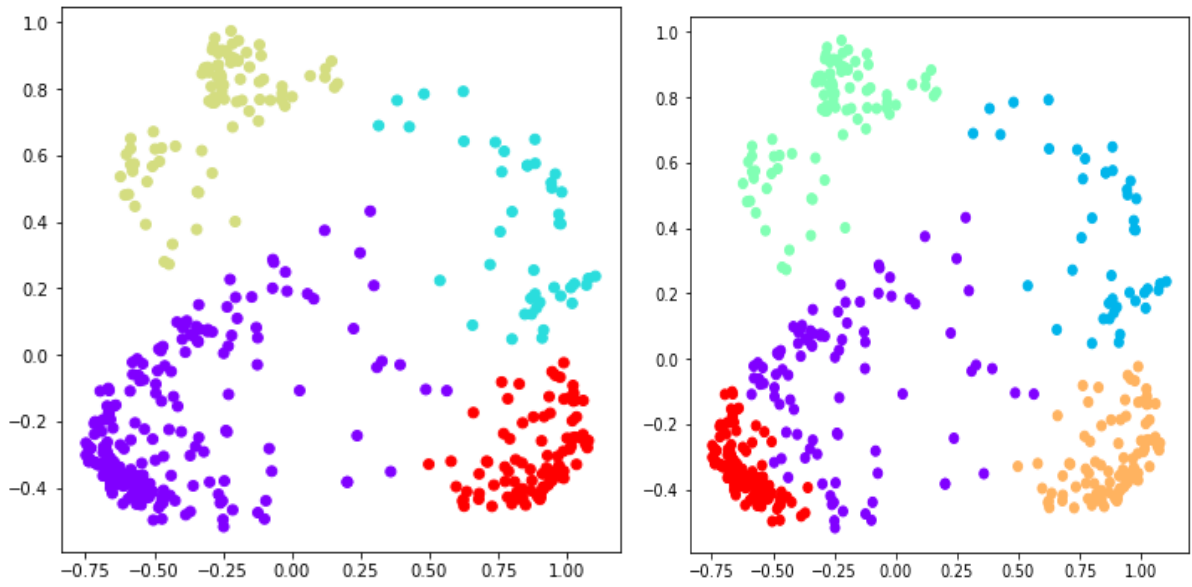


## Applying PCA and visualising the data

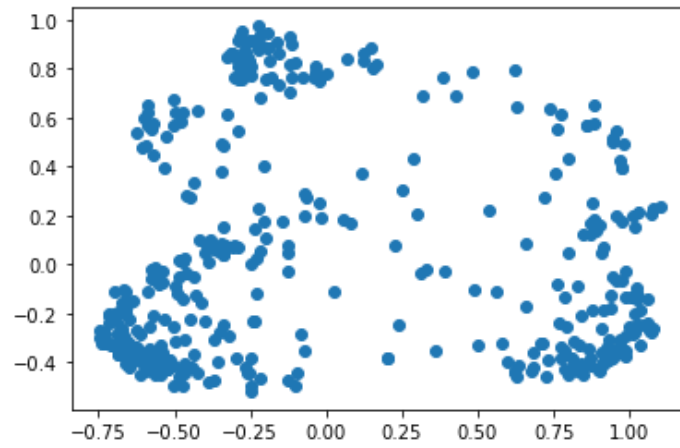


## Agglomerate Clustering





Single-Link Hierachial



Hierarchical K-Means clustering

