**Unsupervised Learning**

Unsupervised Learning is performed when we are trying to predict labels for the unlabelled dataset.

Flow for Unsupervised Learning:

Feature Engineering

1. Missing Values By 0
2. Interpolation
3. Categorical
4. Normalization
5. Correlation
6. PCA

Feature Engineering from the 117 Columns Data set that we have from the Lending Club

Performed KMeans Clustering in Azure and created 2 Clusters through the Machine Learning Studio

Finally predicted the Interest Rate Through Regression using the Clustered Data in Azure

Performed Cluster in R Through Daisy and PAM Functions

Produced the Bend Graph to Decide Clusters

Performed Manual Clustering in R

Clustered Through Grades and created 7 Clusters