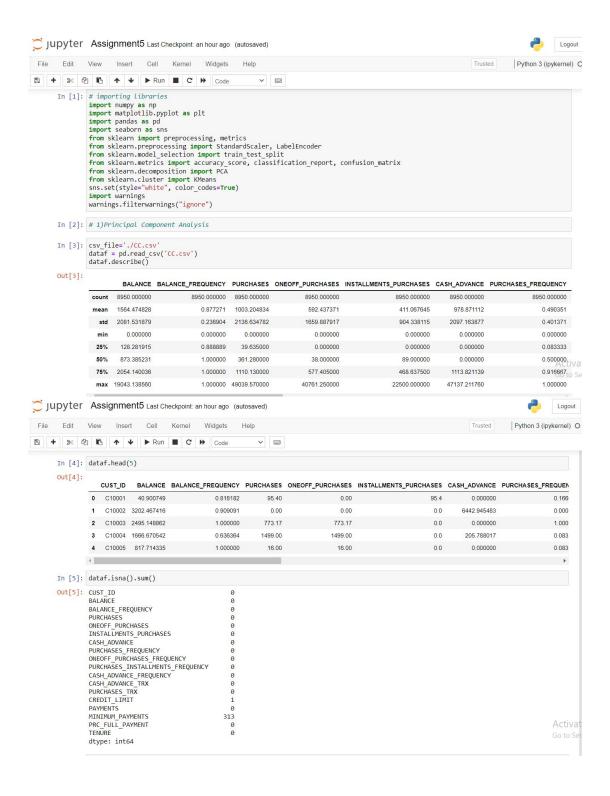
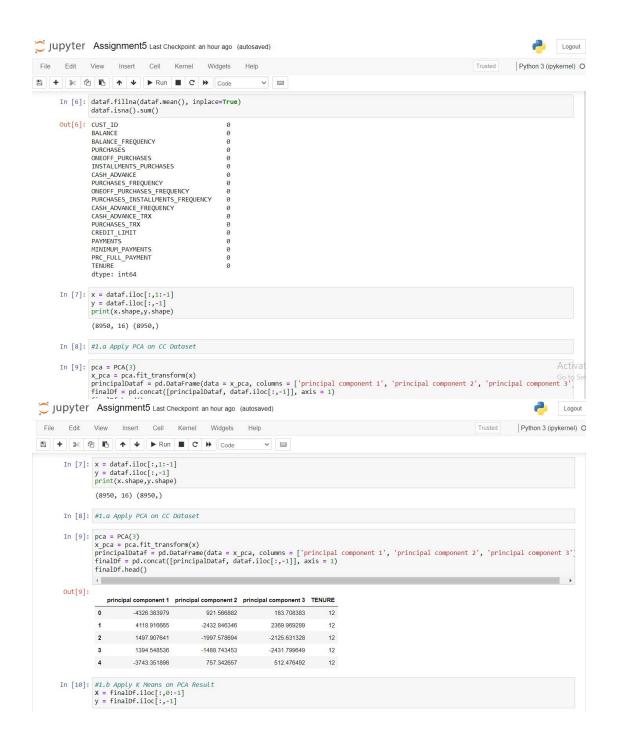
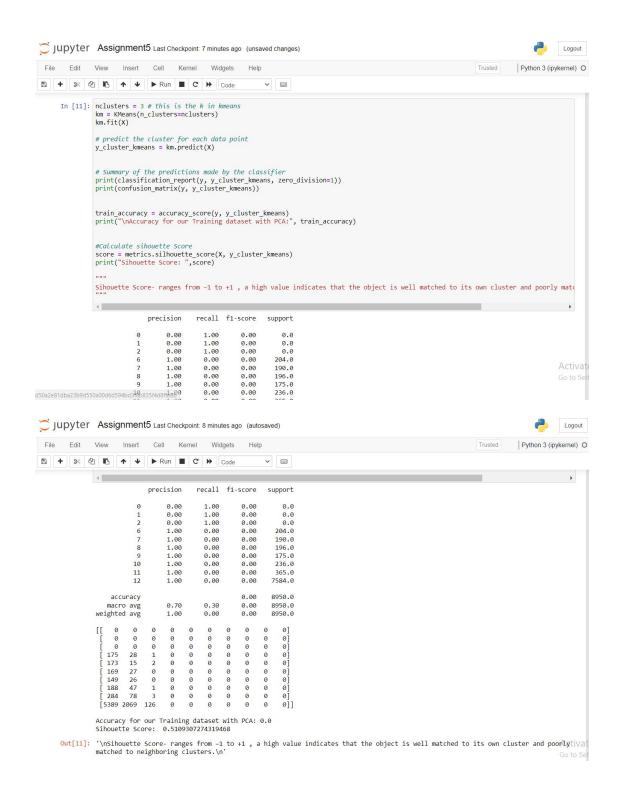
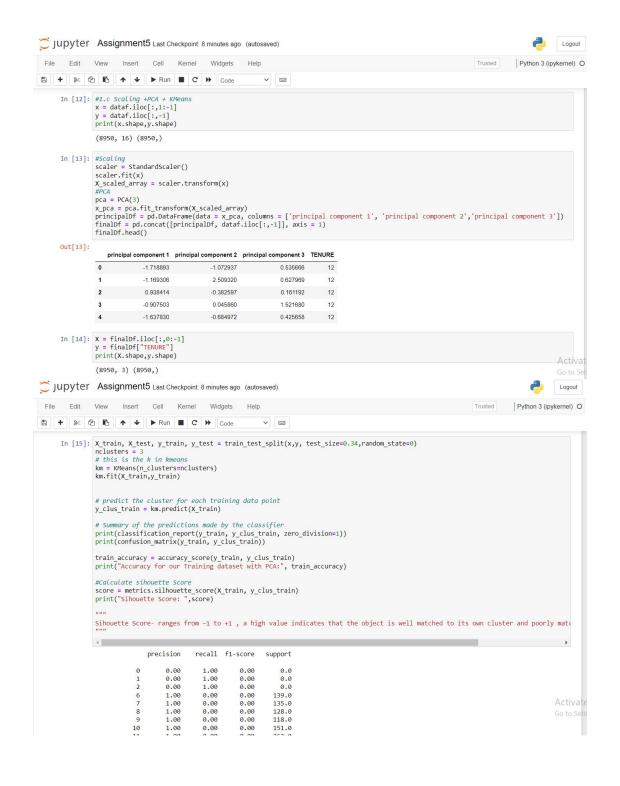
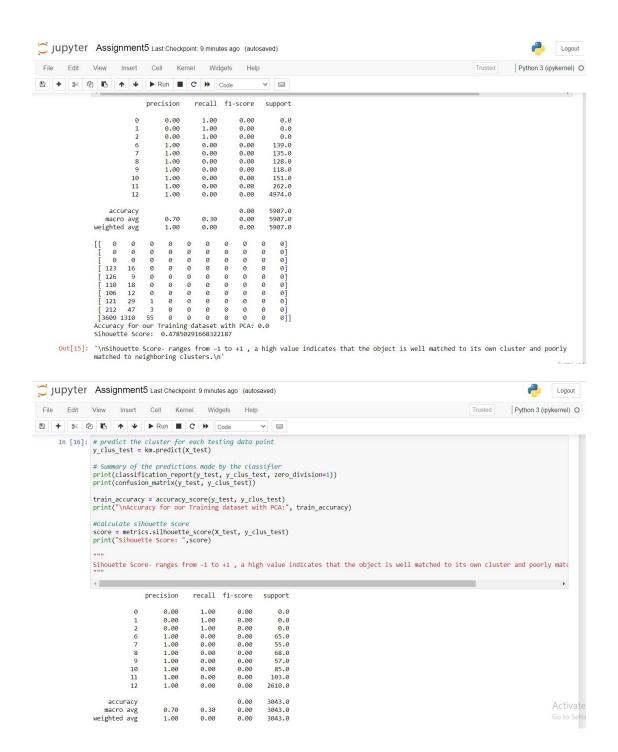
## **ML Assignment 5**

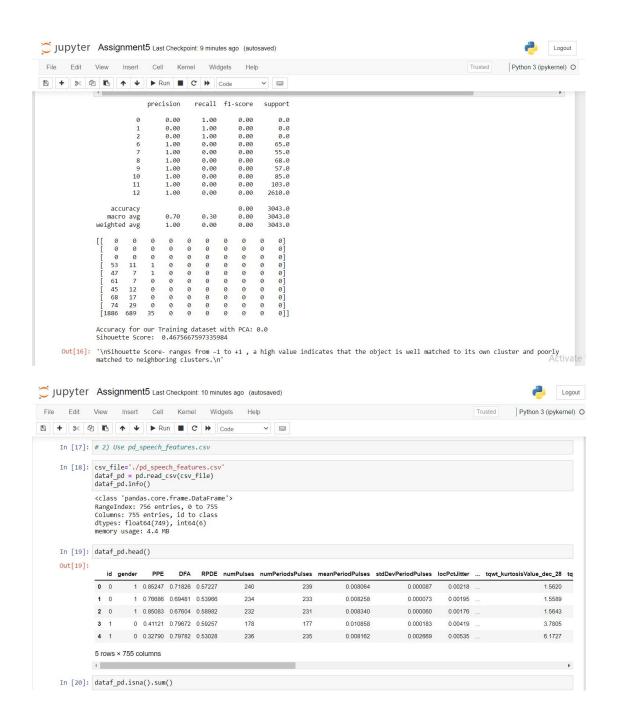


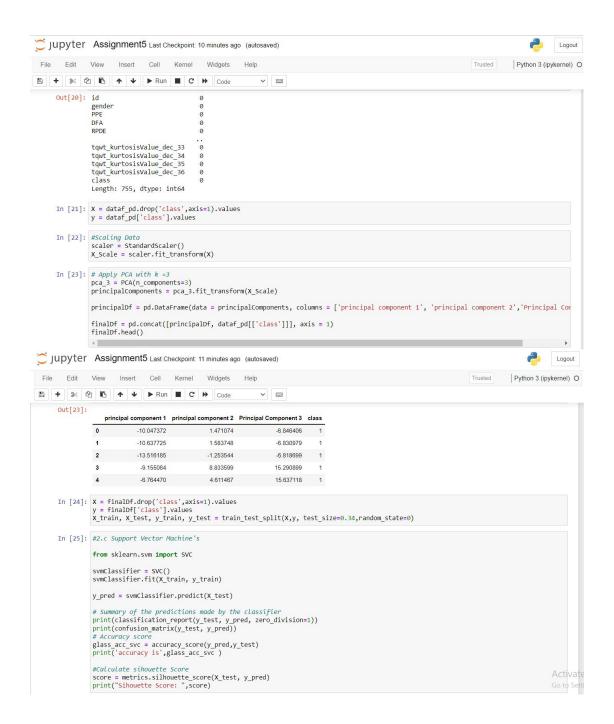


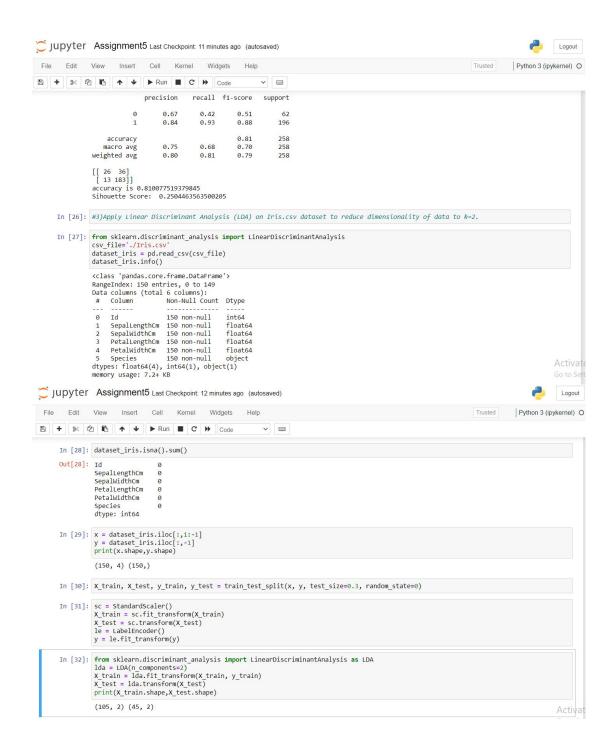












## 4. Briefly identify the difference between PCA and LDA

Linear transformations are the foundation of both LDA and PCA, which strive to maximize variance in a lower dimension.LDA is a supervised learning algorithm, whereas PCA is an unsupervised one.This indicates that LDA searches for maximum class separability while PCA searches for maximum variance directions regardless of class labels.

It combines the features into a smaller set of orthogonal variables known as principle components, which are linear combinations of the original variables. The first component captures the most variability in the data, the second the second most, and so on.

## #LDA

LDA finds the linear discriminant in order to maximize the variance between the different categories while minimizing the variance within the class.

## GIT HUB LINK:

nimmalapudisriram/ML Assignment 5 (github.com)