**Assignment-5**

**Nikhil Bonala- 700745888**

**Github:**

<https://github.com/nikhilbonala/ML_Assignment5>

**Video:** [**https://drive.google.com/file/d/1EiIpJFAhFL1HnwUs9HDZYCCvnsUzudrB/view?usp=sharing**](https://drive.google.com/file/d/1EiIpJFAhFL1HnwUs9HDZYCCvnsUzudrB/view?usp=sharing)

**Question**

**1. Principal Component Analysis**

**a. Apply PCA on CC dataset.**

**b. Apply k-means algorithm on the PCA result and report your observation if the silhouette score has improved or not?**

**c. Perform Scaling+PCA+K-Means and report performance.**

**2. Use pd\_speech\_features.csv**

**a. Perform Scaling**

**b. Apply PCA (k=3)**

**c. Use SVM to report performance**

**3. Apply Linear Discriminant Analysis (LDA) on Iris.csv dataset to reduce dimensionality of data tok=2.**

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





































