

## BCSE209P - Machine Learning Lab

### Digital Assignment 4

1. Implement K Nearest Neighbors algorithm for iris dataset and evaluate the algorithm with accuracy, precision, recall and F1-score.
2. Load a **customer segmentation dataset** with categorical variables (e.g., demographics, shopping preferences).
  - Apply **K-Modes clustering** with different values of **K (number of clusters)**.
  - Use the **cost function plot** (like the Elbow method) to determine the best number of clusters.
  - Evaluate clustering quality using **purity score or silhouette score**.