**ML Lab (CS360)**

**Assignment 4**

**Total Marks: 20**

**Assignment date: 31-Aug-2023**

1. Implement a Naive Bayesian classifier to classify data from the Car Evaluation ([Download here](https://www.kaggle.com/datasets/elikplim/car-evaluation-data-set)) dataset. (10)

Note: Write your own code to implement the classification algorithm without using any inbuilt library functions.

1. a) Split the Iris dataset ([link for dataset](https://www.kaggle.com/datasets/himanshunakrani/iris-dataset)) into training (80%) and testing (20%) sets. (3)

b) Write a code to implement the logistic regression for the dataset from scratch without using any inbuilt library functions. (4)

c) Apply 5-fold cross validation to find the best fold. Consider 10% for validation set. (3)