ML Lab (CS360)

Assignment 3

Total Marks: 10
Submission deadline: 6-Sept-2020 (5PM)
Submission mode: Google Form

Simple Linear Regression (One feature)   Marks: 3 + 3 = 6

1. Implement the linear regression using the (a) Ordinary Least
   Squares (OLS) Method and (b) Gradient Descent Algorithm
   Dataset: Swedish Auto Insurance dataset. Click here to download
   i)   You need to split the dataset into train(60%), validation
        (20%), and test(20%).
   ii) Print the train, validation, and test accuracy

Multiple Linear Regression   Marks: 4

2. Implement the linear regression using the Gradient Descent
   Algorithm
   Dataset: Boston house pricing dataset.
   Hint to load the dataset
        from sklearn import datasets
        boston = datasets.load_boston(return_X_y=False)

   i)   You need to split the dataset into train(60%), validation
        (20%), and test(20%).
   ii) Print the train, validation, and test accuracy