

Assignment #1
CS -697AB ML

Possible Points: 100
Due date: 8th Oct 2020

Name:_____

Email id:_____

Assignment should be done on individual basis.

Q1 Why would you want to use: (25 points)

- Ridge Regression instead of plain Linear Regression (i.e., without any regularization)?
- Lasso instead of Ridge Regression?

Q2 Explain bias/ variance dilemma with regard to the model complexity. (25 points)

Q3 Fit a predictive model to estimate weight of the fish from its length, height and width? (the data source fish.csv can be found here: <https://www.kaggle.com/aungpyaeap/fish-market>)

-Report the coefficients values by using Least Square and Stochastic Gradient Descent Optimizers. (25 points)

Q4 Use iris dataset to train multinomial logistic regression. Perform three-fold cross validation and report the cross validation score. (25 points)