Assignment #1 **Possible Points: 100**
CS-697AB ML **Due date: 25th February 2022**

Name:_____

Email id:
_____

Assignment should be done on individual basis.

Q1 Fit a predictive linear regression 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) (50 points)

-Report the coefficients values by using the standard Least Square Estimates
-What is the standard error of the estimated coefficients, R-squared term, and the 95% confidence interval?
-Is there any dependence between the length and weight of the fish?

Q2 Using the data source in Q1 fit the Ridge and Lasso Regression Models. (25 points)

- Report the coefficients for both the models
- Report the attribute(s) least impacting the weight of the fish.

Q3 Modify the example code for Logistic Regression to include all the four attributes in iris dataset for two class and multi-class classification. Report any difference in the performance if noted. (25 points)