**Instructions Lab 9**

The task for today’s lab is to perform regression analysis on the dataset that describes the strength of concrete. The dataset can be downloaded from:

<https://archive.ics.uci.edu/dataset/165/concrete+compressive+strength>

Today you will do a series of univariate analysis as described below.

For each predictor variable

Build a scatterplot of the target variable with the predictor variable

For k = (1, 4)

Perform a regression with a polynomial of order k

Report the Mean Squared Error and the p-value

Build plots of MSE vs k and p vs k

Based on the above, determine the best value for k

Did you get the same optimal value for of k for each predictor?

Which predictor is the best?

**Show your work, even if it is partial, during the lab hours. What you show during the lab will contribute toward your final grade.**