Problem Statement Part-II

Question 1

What is the optimal value of alpha for ridge and lasso regression? What will be the changes in the model if you choose double the value of alpha for both ridge and lasso? What will be the most important predictor variables after the change is implemented?

- The optimal value of alpha for ridge and lasso regression are
  Ridge - 20
  Lasso - 0.0005

  Important predictor variables are

  MSSubClass
  LotArea
  OverallQual
  OverallCond
  BsmtFinSF1
  TotalBsmtSF

Question 2

You have determined the optimal value of lambda for ridge and lasso regression during the assignment. Now, which one will you choose to apply and why?

- we will choose lasso regression because the R2 score for test data is slightly higher.

Question 4

How can you make sure that a model is robust and generalisable? What are the implications of the same for the accuracy of the model and why?

- The accuracy of the model. In our case its 91% for train and 90% for test.