PS9

gaoningjing0012

March 2020

1 Question 5

the observation is 404

2 Question 6

Optimal Lambda was found to be lambda = 0.0102 The in sample RMSE was = 0.180153 The out of sample RMSE = 0.1682971

3 Question 7

The new optimal value of lambda = 0.0964 The in sample RMSE was = 0.1724076 The out of sample RMSE = 0.1637085

4 Question8

The new optimal value of lambda = 0.214 The in sample RMSE was = 0.180299 The out of sample RMSE = 0.1697518

I prefer choose the LASSO model.

5 Question9

the reason why i would not be able to estimate a simple linear regression model on the housing.train dataframe is the data is non-linear. the values of RMSE are similar in the past 3 questions. The variance is low in the model.