Assignment

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?

Answer:
Ridge: 100
Lasso: 500

if we choose double the value of alpha for both ridge and lasso it will gives maximum error.

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?

Answer:
Ridge: 100
Lasso: 500

Because it's getting more accuracy between Train data (vs) Test data.

Question 3:
After building the model, you realised that the five most important predictor variables in the lasso model are not available in the incoming data. You will now have to create another model excluding the five most important predictor variables. Which are the five most important predictor variables now?

Answer:

1. OverallQual
2. YearBuilt
3. GarageArea
4. OverallCond
5. LotArea

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?

Answer:

1. Some variables are highly co-related with sales price.
2. Getting Train (vs) Test accuracy minimum.