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?

Ans – The optimal value of alpha for ridge regression is 20 and for lasso regression is 1.

If we double the value of alpha for both ridge and lasso, the accuracy of the model will be decreased by some percent.

The important predictor variables after the change are implemented are House style, Year built, 1^{st} Floor & 2^{nd} Floor square feet area, Total rooms above ground and Sale Condition.

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?

Ans – Yes, I have determined the optimal value of lambda for ridge and lasso regression during the assignment. I will choose the default value of lambda for ridge and lasso regression.

Question 3

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?

Ans – Yes, I am sure that my model is robust and generalisable as well because when the values of the independent variables are changing it is not impacting the target variables. And generalisable because the my data is working on the unseen data ie the test data.

This both features help to determine the accuracy of the model because not changing the independent variable and working on the unseen data with good accuracy is hard task and is a very good thing.