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?

- For Lasso Regression the optimal value of alpha is ***0.001***

  For Ridge Regression the optimal value of alpha ***20***

- If the alpha value is doubled,the prediction wont be good enough. Though there wont be any overfit,the accuracy of the model will still decline.
- Important predictor variables after the change
  1. Neighborhood_NridgHt
  2. Neighborhood_Timber
  3. BsmtQual_Fa
  4. KitchenQual_Fa
  5. BsmtFullBath

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?

I would choose Lasso because it produces simpler and more interpretable models that incorporate only a reduced set of the predictors.

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?

- Neighborhood_NridgHt
- Neighborhood_Timber
- Exterior1st_AsbShng
- BsmtQual_Fa
- BsmtFullBath

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?

- Checking if the data is clean and perfect for creating the model
- By checking the accuracy and r2 score
- Checking if the model is not overfit or underfit
- Checking if the model is simple