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

-> For Ridge it is 100 and for Lasso 0.001, so R square of the model was 0.86 approximately. If we double the value s of alpha in Lasso and Ridge, the accuracy becomes almost same, i.e. 0.86
but co-efficient values gets changed.

So, as alpha value gets doubled we don't see a massive difference R-squared values

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?

-> The optimum lambda values are as follows:-
- Ridge - 10
- Lasso - 0.001

The mean squared error in case of ridge and lasso are:-
- Ridge - 0.023280835888714792
- Lasso - 0.023056627124683496

There's bit immprovement we can see with Lasso

After building the model, you realised that the five most important predictor variables in the lasso model are not avai lable 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 n ow?

-> The important predictor variables in our lasso model are:-
MSSubClass
OverallCond
YearRemodAdd
BsmtFullBath
GarageArea

How can you make sure that a model is robust and generalisable? What are the implications of the same for the accu racy of the model and why?
-> Ideally both the models should show similar accuracy or performance in the finite data set, we need to see which one is working fine with test data because,
- As simple as the model is, it'll be more generic and can be widely used
- More the model is simple, it becomes more robust and maintainable
- Complex model normally works fine with training data set, but doesn't work well with test data set, and shows exa mple of overfitting

Regularisation helps us to keep model simple and not making too naive and simple model helps in bias-variance tra de-off