

## Subjective Question & Answer

### 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 is 7 and for lasso is 0.0001. After doubling the values the model performance remained same in both cases, but the value of Mean Squared Error for ridge reduced from 0.0158 to 0.0156

### 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 :** I am choosing lasso because as has the low Mean Squared as compared to ridge.

### 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?

**Ans :**

1. TotalBsmtSF
2. Garage Cars
3. MSZoning\_RM
4. Foundation\_PConc
5. OverallCond

#### **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?

**Ans :**

Too much importance should not be given to the outliers so that the accuracy predicted by the model is high.

To ensure that this is not the case, the outliers analysis needs to be done and only those which are relevant to the dataset need to be retained.