**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 to double the value of alpha for both ridge and lasso? What will be the most important predictor variables after the change is implemented?

**Answer:**

Optimal value of alpha for ridge and lasso regression in my model comes to be 500.

There are some changes in the model when we double the value of alpha for ridge and lasso regression models . The value of coefficients and the order of importance of variables changes after alpha is doubled .

**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:**

I will prefer to apply lasso as it keeps the model simpler.

**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:**

The next 5 important predictor variables are :

**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?