

Question 1

The appropriate value of alpha would be 100. After doubling the value of alpha, there is a slight increase in the r^2 score but is negligible. The main variables would be "GrLivArea", "OverallQual", 'YearBuilt', 'TotalBsmtSF'

Question 2

We decide to go ahead with Lasso as it gave a better r^2 score as well as did feature selection by reducing unwanted variables co-efficient to zero.

Question 4

When the variation in the data does not affect its performance

Does not overfit

Ability to adapt to unseen data