

SUBJECTIVE QUESTIONS&ANSWERS

ADVANCED REGRESSION ASSIGNMENT

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 after the change is implemented?

Answer: the optimal value of alpha for ridge and lasso regression

Ridge alpha = 1.0

Lasso alpha =0.0001

And

R² on training data has decreased and on increased on testing data

Most important predictors are

Lotarea,overallQual,OverallCond,YearBuilt,BsmtFinSF1,TotA
lBsmtSF,GrLivArea,TotRmsAbvGrd,Street Pave,

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: here we are using to solve the problem only lasso regression because it's r^2 score is higher than ridge regression.

Question 3

After building the model, you realized 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 : 5 most important predictor variables are

LotFrontage

BsmtFullBath

Overallcond

Exteriorend_BrkCmm

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?

Answer: given model will be generalized that the test accuracy is not less than train score. it should be accurate for datasets. we do not give the importance for outliers because accuracy predicts by given model which is high value.

When the given model is not robust we can not trust the predictive analysis for

