Property Price Assignment

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Property Price Assignment –

Assignment-based Subjective Questions

- Q1 : 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 1 :
  - Ridge Optimal Alpha : 5
  - Lasso Optimal Alpha : .001
  - R2 Score is reducing in both models Ridge & Lasso If you double the alpha
  - Most Important predictor variable after the changes are
  - Ridge
    - BsmtHalfBath , BedroomAbvGr , BsmtFullBath, YrSold_Old, BsmtQual, Somerst, SWISU, LotArea, HeatingQC, KitchenAbvGr
  - Lasso
    - BsmtQual, Somerst, BsmtHalfBath, BedroomAbvGr, YrSold_Old, BsmtFullBath, SWISU, HeatingQC, LotArea, KitchenAbvGr

Property Price Assignment – Continue..

Assignment-based Subjective Questions

- Q2 : 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 2 : Final Model is Lasso r2_score is almost same but r2_score for test set is better in Lasso as lasso will penalize more on the dataset and can also help in feature elimination I will consider Lasso as my final model.

- Q3 : 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?
- Ans 3:
  - Before Rebuilding model, top 5 features : YrSold_Old, BsmtHalfBath, BedroomAbvGr, BsmtQual, Somerst
  - After Rebuilding model, top 5 features : FullBath, RH, GrLivArea, BsmtCond, Somerst