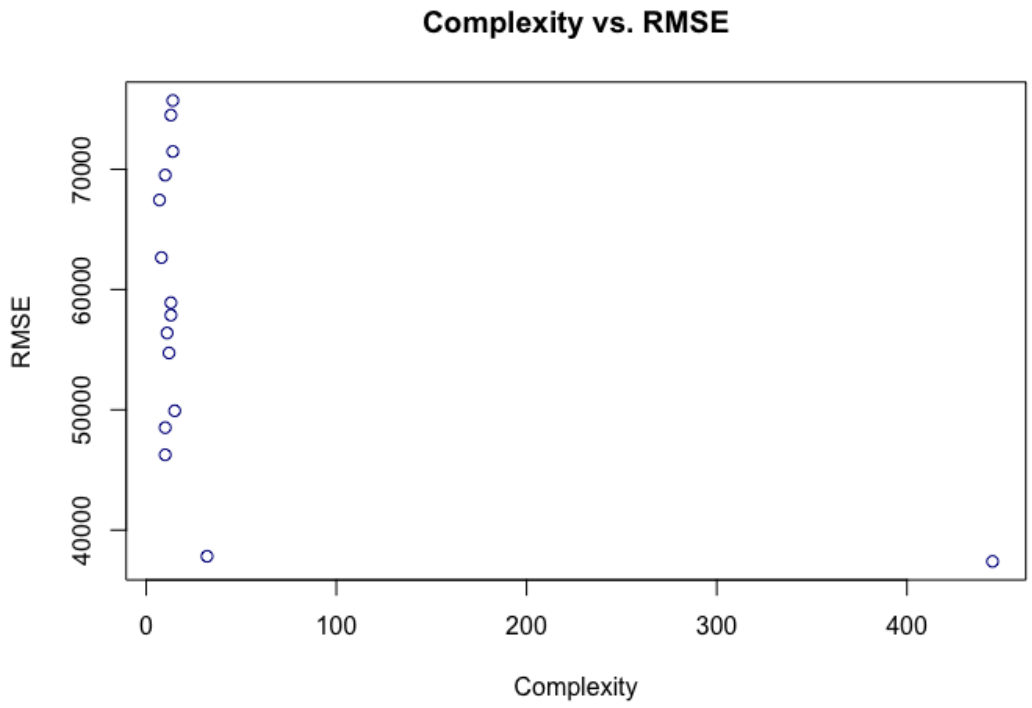
Group 13
SSC 442 – Lab 03
2/13/2020

Lab3

EXERCISE 1:

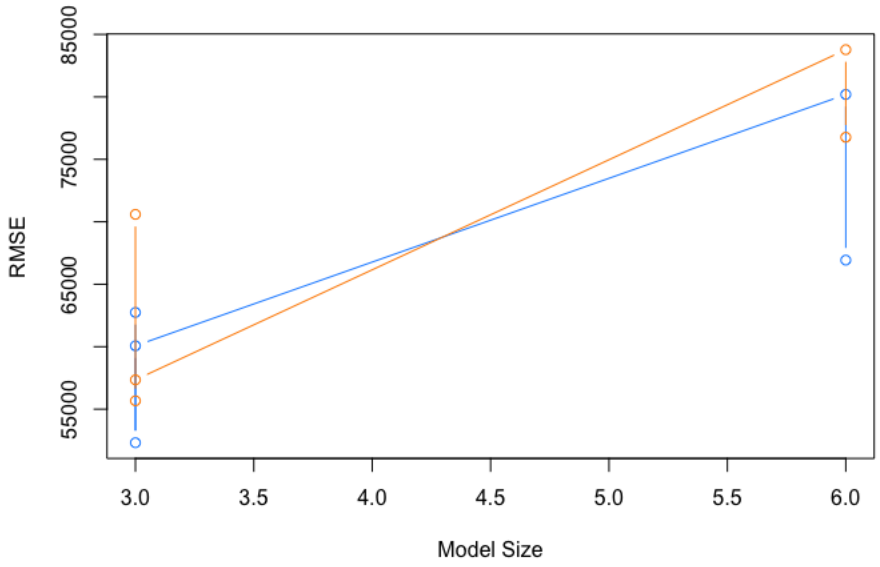
1. Drop OverallCond and OverallQual
   Coding part*: Ames <- select(ameslist, -c(OverallQual,OverallCond))*

2. We created a series of models up to complexity length 15. We used all variables to generate our first model, which is a full-size model. The data is too complex and takes a long time, which is the disadvantage of a full-size model. Due to this, we do not believe it makes sense to use a full-size model.



EXERCISE 2:

The visualization we created has a couple of functions to it. First, we have the data that is attempting to fit a model (train_rmse). This doesn't tell any sort of specific story, so the other part of this is the test_rmse variable which describes how well the train_rmse data and model fit one another. With this, we can tell if we are accurately fitting and predicting with our models.



After taking five different linear models with attributes such as GrLivArea (continuous), Heating (categorical), and compiling them to create the train_rmse model, we were able to produce this graphic. (Note: all of the data not used by the train_rmse variable was used in the test_rmse variable)

In regard to how well the accurately the train_rmse is able to predict, it can be seen that it is close to being deemed a good predictor. However, there are fitting issues. The blue line, representing the train_rmse model, looks almost as if it is inverse to the test_rmse model (orange line) in relativity to the data points on the opposite side of the graphic. If compared to other representations within the classroom, this may stand well on its own however different descriptors and clearer explanation of the visualization may supersede over ours.