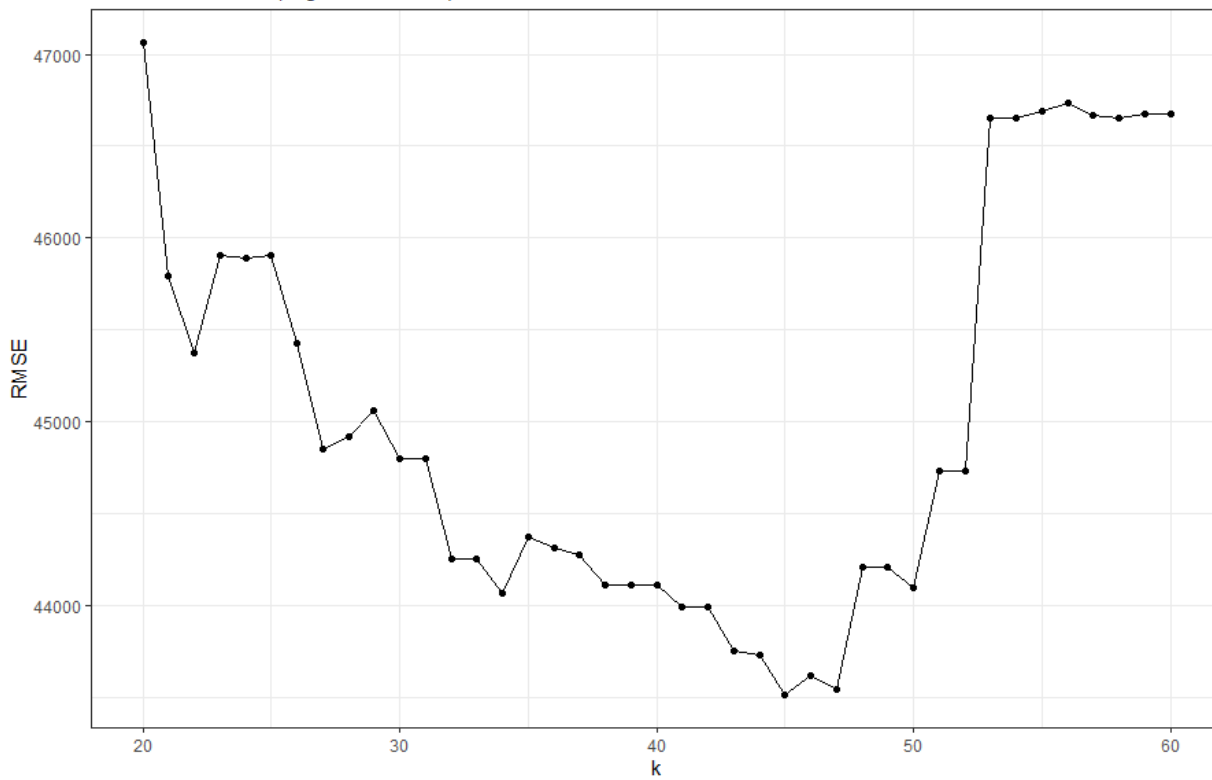


Carl Xi (cxi2)

### Question 1

\*RMSE plotted against k number of end nodes (20 to 60) for Regression Tree

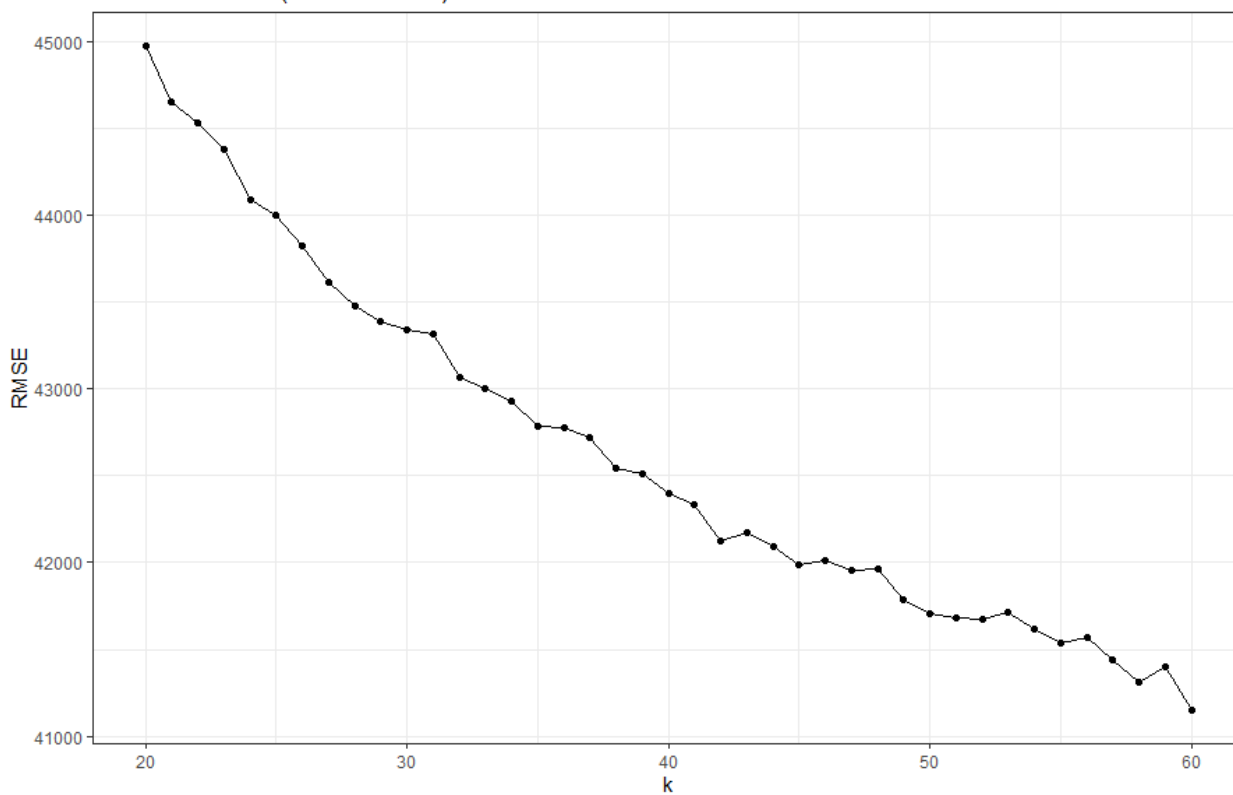
Q1 - RMSE vs k (regression tree)



### Question3

\*RMSE plotted against k number of end nodes (20 to 60) for Random Forest

Q3 - RMSE vs k (random forest)

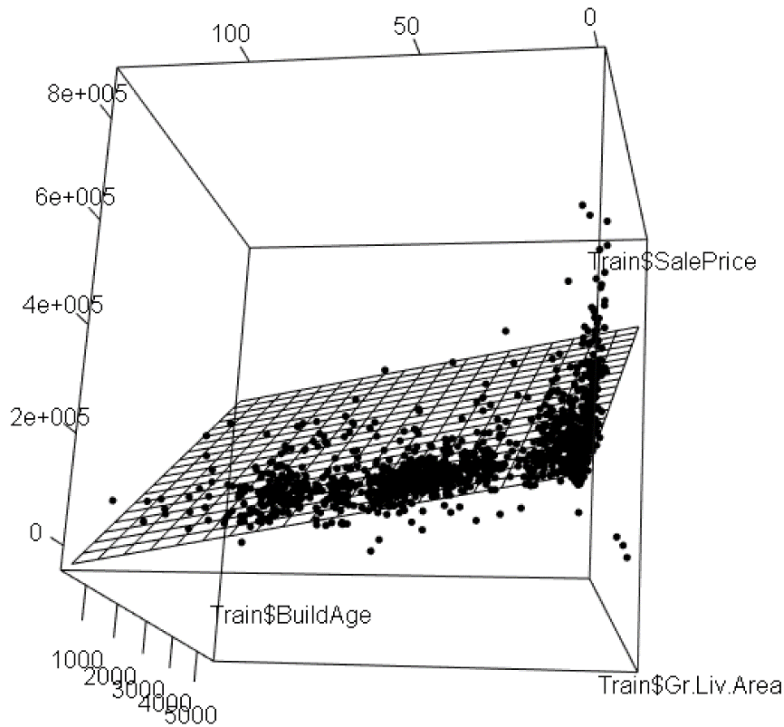


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#### Question 4 (3 Graphs):

\*Keras Least Squares Linear Regression (Simple)

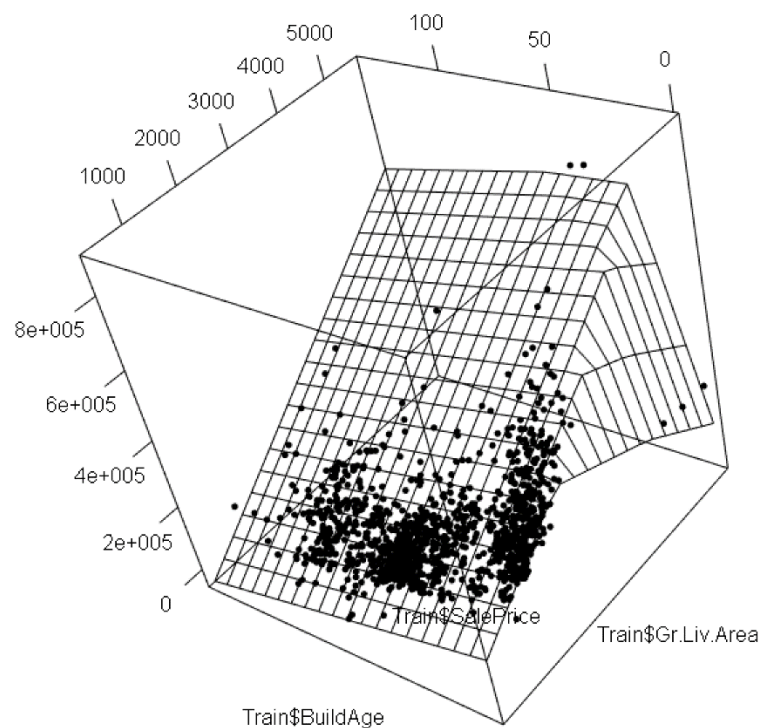
\*The view of the graph aims to provide a balance between showing the regression plane from a bird's eye view, showing the regression plane's sense of depth, and the distribution of individual data points



#### Question 5 (3 Graphs):

\*Neural Net Model with a layer of 4 ReLU nodes (units).

\*The view of the graph aims to provide a balance between showing the regression plane from a bird's eye view, showing the regression plane's sense of depth, and the distribution of individual data points

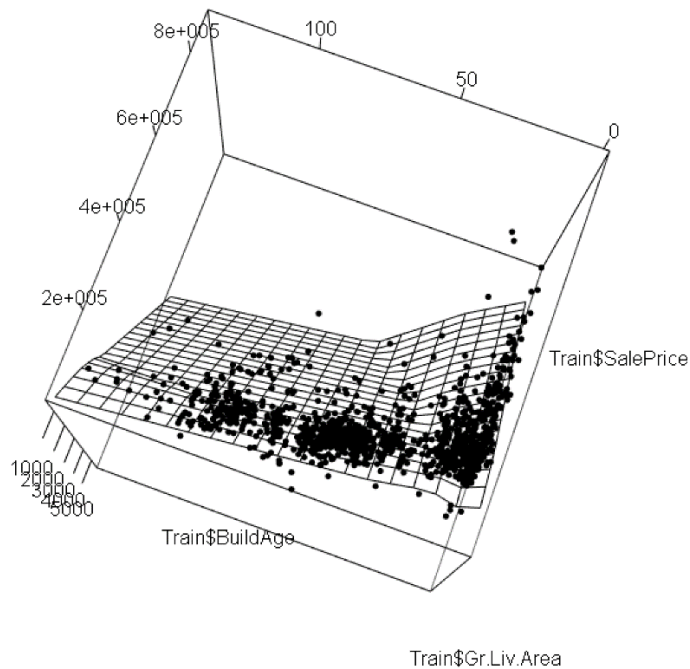


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**Question 6 (3 Graphs):**

\*Neural Net Model with a layer of 10 ReLU nodes (units). (The model is made 'wider')

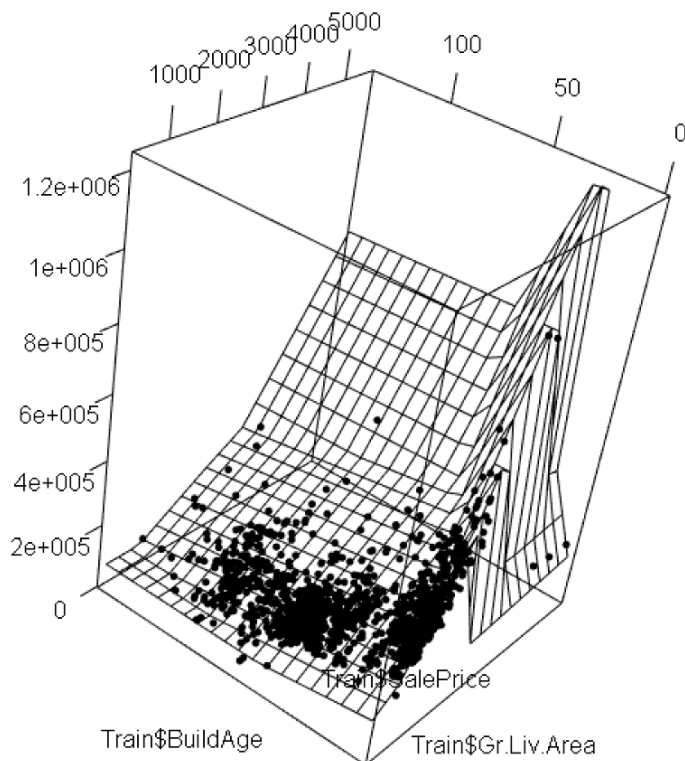
\*The view of the graph aims to provide a balance between showing the regression plane from a bird's eye view, showing the regression plane's sense of depth, and the distribution of individual data points



**Question 7 (3 Graphs):**

\*Neural Net Model with 3 layers of 4 ReLU nodes (units). (The model is made 'deeper')

\*The view of the graph aims to provide a balance between showing the regression plane from a bird's eye view, showing the regression plane's sense of depth, and the distribution of individual data points



Carl Xi (cxi2)

**Question 8 (3 Graphs):**

\*Neural Net Model with 4 layers of 10 ReLU nodes (units). (The model is made 'deeper' AND 'wider')

\*The view of the graph aims to provide a balance between showing the regression plane from a bird's eye view, showing the regression plane's sense of depth, and the distribution of individual data points

