**Expected outputs**

For both LR1 And LR2, use comments to

* + Define Linear regression   
    **Simple** linear regression
  + The meaning of plotting the test versus predictions – be specific for both LR1 and LR2
  + The meaning of the margin of error in the predictions versus the model– be specific for each part
  + The meaning of the accuracy of the model. Do you understand the meaning of “Mean Absolute Error”, Mean Squared Error”, “Root Mean Squared Error”? They factor into the most important factor, the r-squared value. Be specific for each part
  + The meaning of the r-squared value.
  + Define **Coefficient of the line**
  + Define **Intercept of the line**

LR1 Questions: How does the simple linear regression model results (using sqft\_living) compare to the multiple regression we ran in the tutorial. Which model (which features) better capture the variation in y based on the variation in the feature(s)? Justify your response based on output from your model(s).

**LR1**

Mean Absolute Error: 170780.93

Mean Squared Error: 61940787124.62

Root Mean Squared Error: 248879.06

r square : 0.48

Intercept of the model: -48257.06

Coefficient of the line: [283.97]

**LR2**

Mean Absolute Error: 4.18

Mean Squared Error: 21.598 or 21.60 rounded

Root Mean Squared Error: 4.647 or 4.65 rounded

r square : 0.945 or 0.95 rounded

Intercept of the model: 2.018

Coefficient of the line: [9.91]