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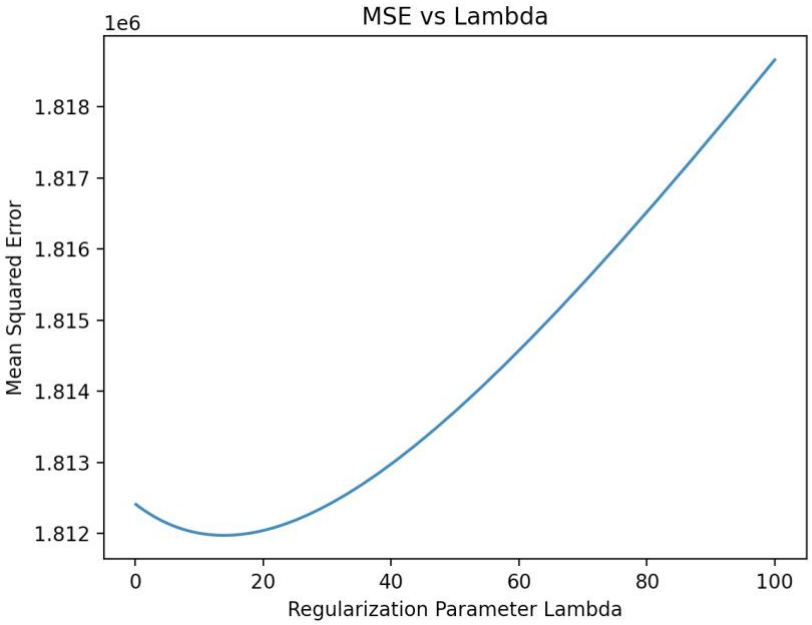
Dr. Inouye
Problem2_writeup

Problem 2



6.

Best lambda tested is ***13.489628825916533***, which yields an MSE of ***1811976.5702684582***, which is the location of the minimum point on the line in the plot.

7.

$$y(x) = 5115.65136992x_1 - 201.49769618\,x_2 - 207.15474973\,x_3 - 1338.29096939\,x_4 + 219.18597862\,x_5 - 66.36405012\,x_6 + 500.9098275\,x_7 + 74.30622797\,x_8 - 459.07248485\,x_9 + 3928.07687554$$

The predicted price for a diamond with the attributes listed in the problem is $437.28.