


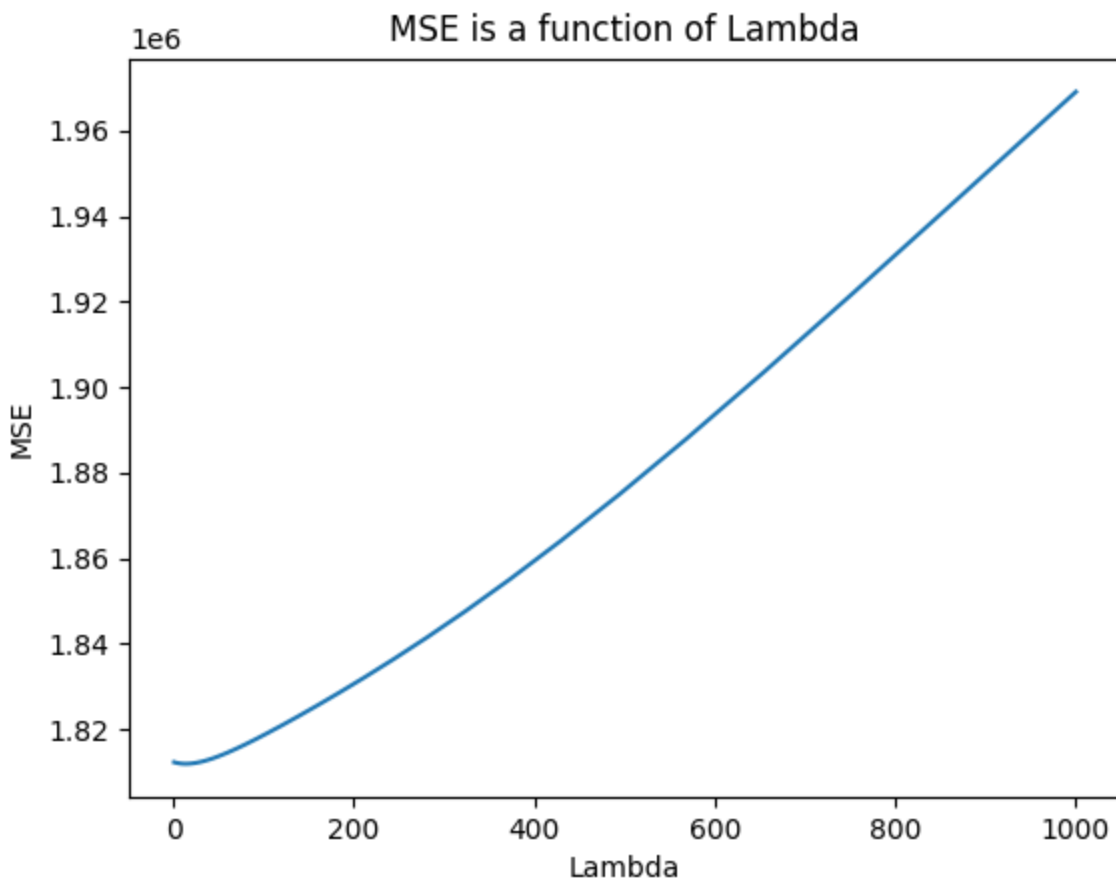
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problem2_writeup 



Based on the range of Lambda values tested, the best lambda value is 14.563484775012437, which yields an MSE of 1811977.1732371862

Equation of the best fitted model:

$$y(x) = 5112.15519761x_1 - 200.98248228x_2 - 207.14794325x_3 - 1330.75810931x_4 + 217.69361706x_5 - 69.0190039x_6 + 500.94160313x_7 + 74.33788618x_8 - 458.97374368x_9 + 3928.07687554$$

The predicted price for 0.25 carot, 3 cut, 3 color, 5 clarity, 60 depth, 55 table, 4x ,3y, 2z diamond is 9721.45571303942, which was determined by MSE and predicted values.¶

In []: