**ME365D - Task 1**

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After creating a linear regression model from the data, I obtained these values for the mean average error and mean square error:

|  |  |
| --- | --- |
| Mean Average Error | 3.61% |
| Mean Square Error | 20.44% |

From this, we see a significantly higher error for mean square, meaning that we have some outliers in the data, since mean square error puts higher weights on values that are further away from the predictive model.

I have created a python script that allows a user to predict restraint tips using this model.

You input the following:

* Total Bill
* Number of Customers
* Gender
* Smoker
* Day
* Time

And the script will output:

* Total tip
* Tip percentage

See attached script called “restaurant\_tip\_predictor.py”.