Homework: Elasticities

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1. Price elasticity of weekdays: -1.7630

2. Price elasticity of weekends: -1.4369

3. Weekdays: price at $578, fill all 100 rooms for a total revenue of 100\*578 = $57,800

4. Weekends: price at $865, fill all 100 rooms for a total revenue of 100\*865=$86,500

I simulated every possible integer dollar charge for a room and calculated the number of rooms sold and total revenue. Since customers are very price-sensitive and elasticities are high, pricing “low” and filling all 100 rooms is the strategy to maximize revenue. Note that these prices are very high compared to the prices we saw in our data set. We are extrapolating our model to a region where we don’t have much data for (very few rooms and high prices) and where variation is high and not well-explained by our model.