CE888 Lab2

Omar Eldardeer

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Lab 2 is divided into three parts plotting, Bootstrap, and power analysis

1 Plotting

Five plots had been created for vehicles. vehicles has two columns one for the old fleet and the other one for the new fleet

1. the new fleet vs the old fleet

2. the old fleet vs index

3. the new fleet vs index

4. the histogram of the old fleet

5. the histogram of the new fleet

2 Bootstrap

Bootstrap function had been implemented. a small main program used this function to calculate the mean with lower and upper values with alpha confidence interval and different iteration numbers. The main function applied to customers and each column in vehicles (new fleet and old fleet)

The new and old fleet are not comparable because there are huge difference between their sizes.

However the new fleet has better average value, we can't say it is better than the old fleet

3 Power Analysis

Compare.py file had been implemented this file contains a function to perform AB Test

Then Power function had been implemented it uses ab test function in each iteration

finally small script had been implemented to try the poer function