# Lab-2

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### January 2019

1 Introduction

Write a very small text description of the analysis in Overleaf, download the pdf and put in in Github alongside the rest of your lab2.

2 Result Analysis

In this **Lab-2**, First we have created a vehicles.py file in Pycharm, then we readed the vehicle.csv file to Create and save scatterplots and histograms for the current fleet and the proposed fleet (New Fleet) as shown below:-
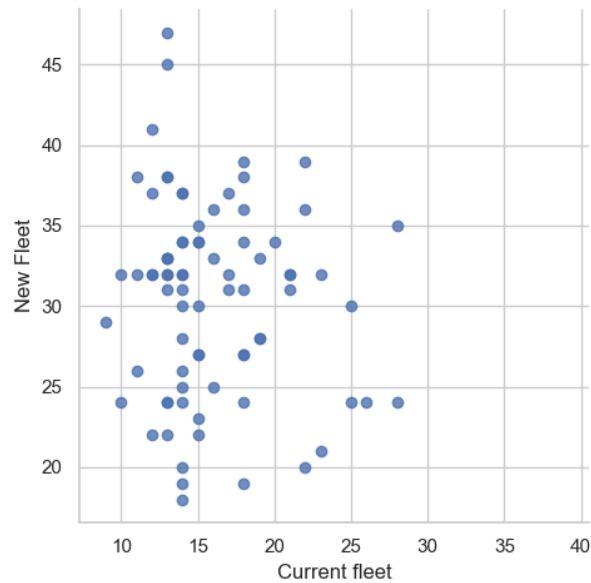
Then, We have used the bootstrap.py to create a function bootstrap on salaries.csv dataset for calculating bootstrap confidence while using percentile function on Numpy i.e Mean, Lower and Upper as shown below:-

Histogram for Current Fleet

Histogram for New Fleet
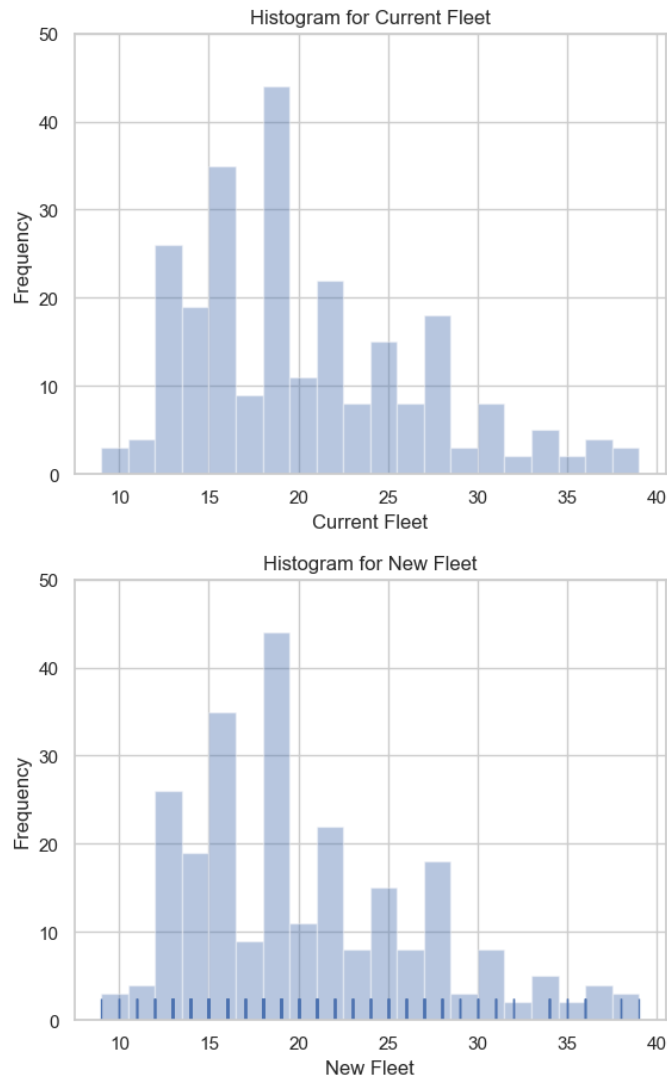
After that, we have created the new file called bootstrapvechicles.py to create a function bootstrap on vechicles.csv for comparison algorithm that requires the upper and lower bounds for the mean in order to say which fleet is better.i.e Current or New Fleet as shown below:-

Current Fleet: (20.141535341365465, 19.353413654618475, 20.935843373493974)

New Fleet: (30.48787215189873, 29.151898734177216, 31.848101265822784)

As per the given result **New Fleet data is much better then Current Fleet**.