**Background**

The ride sharing bonanza continues! Seeing the success of notable players like Uber and Lyft, you've decided to join a fledgling ride sharing company of your own. In your latest capacity, you'll be acting as Chief Data Strategist for the company. In this role, you'll be expected to offer data-backed guidance on new opportunities for market differentiation.

You've since been given access to the company's complete record set of rides. This contains information about every active driver and historic ride, including details like city, driver count, individual fares, and city type.

The goal is to take what I've learned about Python Matplotlib and apply it to some real-world situations. The assignment is to create a Bubble Plot and three various pie charts.

**Approach**

Read the provided city data (including city, city type and driver count) and ride data (including city, date/time of ride, fare, ride id). Some of the data analysis will require ride and city data to be merged – so merge on city.

Utilizing Jupyter Notebook, Python and Pandas, perform variance data analysis to identify trends and key data observations.

Data Assessments completed on provided data include:

* Create a Bubble Plot that will plot:
  + Average Fare ($) by city
  + Total Number of Rides by city
  + Total Number of drivers by city
  + City Type (Urban, Suburban and Rural)
* Create three pie charts that will depict:
  + % of Total Fares by City Type
  + % of Total Rides by City Type
  + % of Total Drivers by City Type

**Observations**

* Rural cities have the higher average fare of the 3 city types, and by a great margin, the least number of rides. Rural cities are contributing only 6.8% of total revenue even with the higher average fare.
* Urban cities are contributing 62.7% of total revenue from fares, 68.4% of total rides, and 80.9% of total drivers. The number of drivers and the number of rides is likely resulting in the lower average fare results.
* Suburban cities are contributing 30.5% of total revenue, having 26.8% of total rides, with only 16.3% of the drivers.