**Description of three observable trends based on the data.**

**Homework 05 – Matplotlib**

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I chose option 1: “pyber.” This is data from a ride share service like Uber or Lyft. The data incorporates individual rides with the city, date, fare ($’s), a ride id (unique per ride), the driver count (total number of drivers in that city) for that city and the type (urban, suburban, rural). I used this data to create a bubble chart that shows the number of rides per city, and the average amount of the fare’s in that city. With the additional element of also showing a visual representation of the drove count, by the size of the bubble. I also create three pie charts. 1) % of Total Fares by City Type, 2) % of Total Rides by City Type, 3) % of Total Drivers by City Type.

This is a list of some of the trends that I see in the data.

* Urban has the most amount of drivers per city then, Suburban, then in last place is rural
  + This is most likely representative of the populations. It would be interesting to add the city population data to this information to see what the number of drivers % in relation to the population. I would suspect that they would be about even across the three city types, but we would want the data to tell us so that would could be sure.
    - This information might be useful in advertising campaigns.
* For the most part, the more drivers, the more rides that city has
  + In other words, the number of rides appears to correlate with the number of drivers
    - Would be interested to know if this is because of the number of drivers, or the population size
* The more rural areas trend higher on the average fare
  + This would make sense because we would guess that the trips would be longer
  + This might say that we should advertise more in the rural areas as each trip brings in more total $’s