Project 1

**Question/need:**

* Looking the data, we need to know which trip is the most popular, to increase the number of the Bikes in start station to minimize the lack of bikes in that station.
* We need to know when the most common month, day and hour for all trips are,

to take the opportunity in the free traffic time for performing maintenance on the bikes.

* For the purpose of advertisement, we need to know the average age for bike’s riders and what is their gender.
* We need to know which trip is the longest trip and from which start station to provide more bikes into that station by taking in consideration that the bike wither it is returned into the same station or returned on other station.

#### Data Description:

#### The data used in this project represent a bike share system provider for many major cities in the United States, to uncover bike share usage patterns. The data provided is only for New York city. The data used in this project in intended for Citibike company and advertisement company. We have multiple features in this date as the following:

|  |  |
| --- | --- |
| Feature | Example |
| **Start Time** | **(e.g., 2017-01-01 00:07:57)** |
| **End Time** | **(e.g., 2017-01-01 00:20:53)** |
| **Trip Duration** | **(in seconds - e.g., 776)** |
| **Start Station** | **(e.g., Broadway & Barry Ave)** |
| **End Station** | **(e.g., Sedgwick St & North Ave)** |
| **User Type** | **(Subscriber or Customer)** |

#### Tools:

#### I will use python to tackle questions mentioned above with the following libraries:

#### Panda: For data Processing and data cleaning.

#### Matplotlib: For visualization, the relation between features.

#### MVP Goal: