**BIKE TRIP HISTORIES**

**Introduction:**

To persuade investors that a bike-sharing program is a sound business idea, more needs to be done. One of the major stakeholders wants a bike trip study to support the plan. I'll use Pandas to convert the "travel duration" column from an integer to a Date Time datatype for this analysis.

**Objectives:**

We have following Objectives in this Regard. Some of them are as follow,

* Show the length of time that bikes are checked out for all riders and genders.
* Show the number of bike trips for all riders and [genders](https://public.tableau.com/profile/whitney.shine#!/vizhome/NYCCitibikeChallenge_16218973329460/CreatetheTripsbyGenderWeekdayperHour) for each hour of each day of the week.
* Show the number of Bike trips for each type of user and gender for each day of the week.

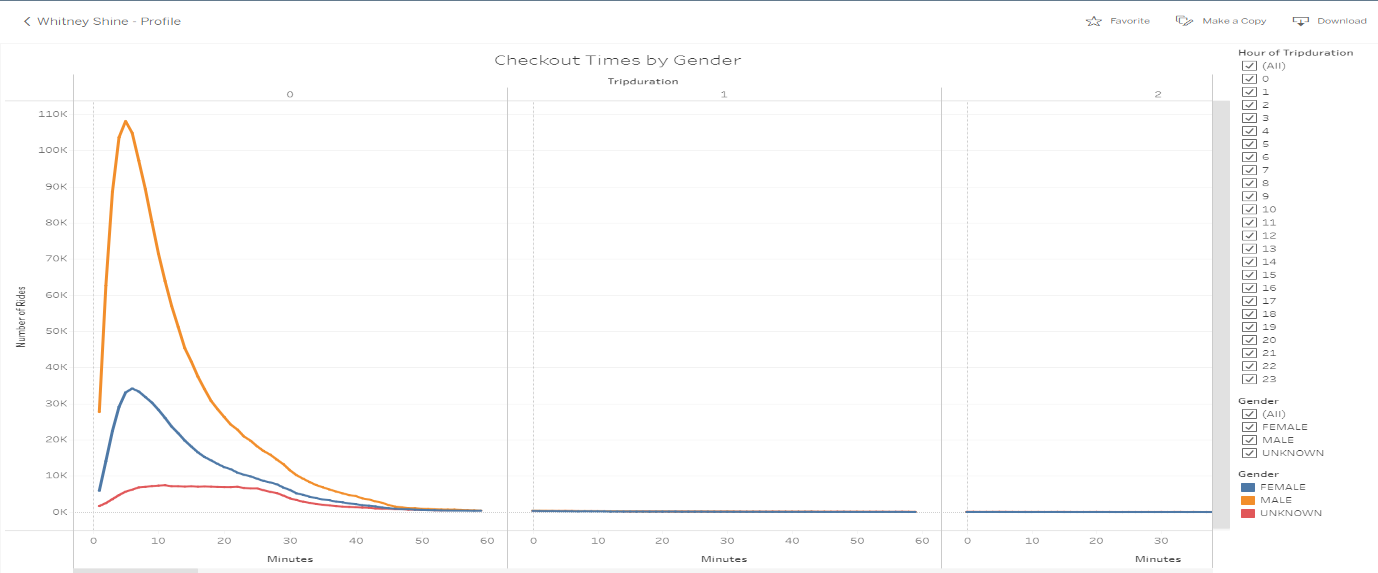
**Code:**

**First push to Call the CSV data.**

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|  | "1 274.0 Lafayette Ave & Fort Greene Pl 40.686919 \n", |
|  | "2 2000.0 Front St & Washington St 40.702551 \n", |
|  | "3 479.0 9 Ave & W 45 St 40.760193 \n", |
|  | "4 3312.0 1 Ave & E 94 St 40.781721 \n", |
|  | "\n", |
|  | " start station longitude end station id end station name \\\n", |
|  | "0 -73.992663 408.0 Market St & Cherry St \n", |
|  | "1 -73.976682 3409.0 Bergen St & Smith St \n", |
|  | "2 -73.989402 3388.0 President St & Henry St \n", |
|  | "3 -73.991255 473.0 Rivington St & Chrystie St \n", |
|  | "4 -73.945940 3312.0 1 Ave & E 94 St \n", |
|  | "\n", |
|  | " end station latitude end station longitude bikeid usertype \\\n", |
|  | "0 40.710762 -73.994004 35305 Subscriber \n", |
|  | "1 40.686744 -73.990632 38822 Subscriber \n", |
|  | "2 40.682800 -73.999904 18373 Subscriber \n", |
|  | "3 40.721101 -73.991925 25002 Subscriber \n", |
|  | "4 40.781721 -73.945940 31198 Subscriber \n", |
|  | "\n", |
|  | " birth year gender \n", |
|  | "0 1996 2 \n", |
|  | "1 1998 2 \n", |
|  | "2 1988 1 \n", |
|  | "3 1988 1 \n", |
|  | "4 1965 2 " |
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|  | "starttime object\n", |
|  | "stoptime object\n", |
|  | "start station id float64\n", |
|  | "start station name object\n", |
|  | "start station latitude float64\n", |
|  | "start station longitude float64\n", |
|  | "end station id float64\n", |
|  | "end station name object\n", |
|  | "end station latitude float64\n", |
|  | "end station longitude float64\n", |
|  | "bikeid int64\n", |
|  | "usertype object\n", |
|  | "birth year int64\n", |
|  | "gender int64\n", |
|  | "dtype: object" |
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|  | "# 4. Check the datatypes of your columns. \n", |
|  | "clean\_citibike\_df.dtypes" |
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|  | "# 5. Export the Dataframe as a new CSV file without the index.\n", |
|  | "clean\_citibike\_df.to\_csv(\"cleaned-citibike-tripdata.csv\", index = False)" |
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|  | "name": "python", |
|  | "nbconvert\_exporter": "python", |
|  | "pygments\_lexer": "ipython3", |
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Results:



Graphical user interface, chart, Excel

Description automatically generated

Background pattern

Description automatically generated with medium confidence

Graphical user interface, application, PowerPoint

Description automatically generated

Graphical user interface, PowerPoint

Description automatically generated

Chart

Description automatically generated

**Conclusions:**

Since, in this project there are three deliverables which is about the number of bikes checked out and also the trip on the basis of gender vice versa. We have completed all those deliverables as shown above through our coding and their Result’s Representation. Also now we are familiar with the project bike trip Histories.