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**CitiBike Analysis Documentation**

**Code**

There are 2 python files containing code.

The “**data\_table\_creation.py**” file shows how I initially processed the data and how I created the data tables contained in the folder.

The “**bike\_analysis.py**” file contains the dynamic, interactive model. Feel free to experiment with the model parameters.

**Tables (Excel sheets)**

There are 8 tables contained in the folder.

The “**adjacency**” table contains the adjacency matrix.

The “**asymrat**” table contains the asymmetry values for each pair of stations.

The “**coordinates**” table contains the latitude and longitude of each station.

The “**distancebetweenpts**” table contains the distance between each pair of stations.

The “**stf**” table contains the number of rides in and out of each station.

The above 5 tables are created by the “**data\_table\_creation.py**” file.

The “**201910-citibike-tripdata**” table is the raw data downloaded from Citibike’s website.

The “**num\_rides**” table is a copy of the “stf” table but with the 21 stations that have <100 total rides highlighted.

**Map**

The “**map.html**” file contains the interactive map. The map should run in any browser. Running the model will reset the map. The map dynamically updates along with the model. To see the new map after new parameters are entered into the model, simply **refresh the page** in the Internet browser in which you are viewing the map.

The “**My Parameter Map.html**” file contains the map corresponding to the parameters I used for the model. It will not change if the model is run.