

# EDA OF THE MTA TURNSTILE FOR A CHARITY ORGANIZATION

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# BUSINESS STORY

Help a non-profit organization called 'The kids are the future' hand out an event flyer to the summer charity event that they are throwing for children with cancer. They want to achieve these goals:

- ❖ Get enough exposure to advertise for the event and the organization work.
- ❖ Target the high-to-medium-income commuters of the subway in New York city.

# THE APPROACH



Collecting the data for the months of 6,7,8,9 of 2019 and add it into a DB



Cleaning the data



Doing the Exploratory Data Analysis



Giving recommendations to the business

# CLEANING THE DATA

Entries and exits numbers are cumulative.

Counters work in reverses or reset

Finding the traffic in the stations

# CLEANING THE DATA

Adding new columns such as date and time as timestamp. Also, the names of day column

Checking duplicates and strip the columns names

Checking null values

Dealing with the DESC column

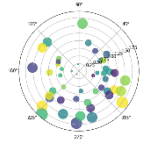
# TOOLS



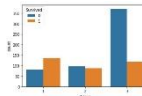
Jupyter



Git



Matplotlib



Seaborn



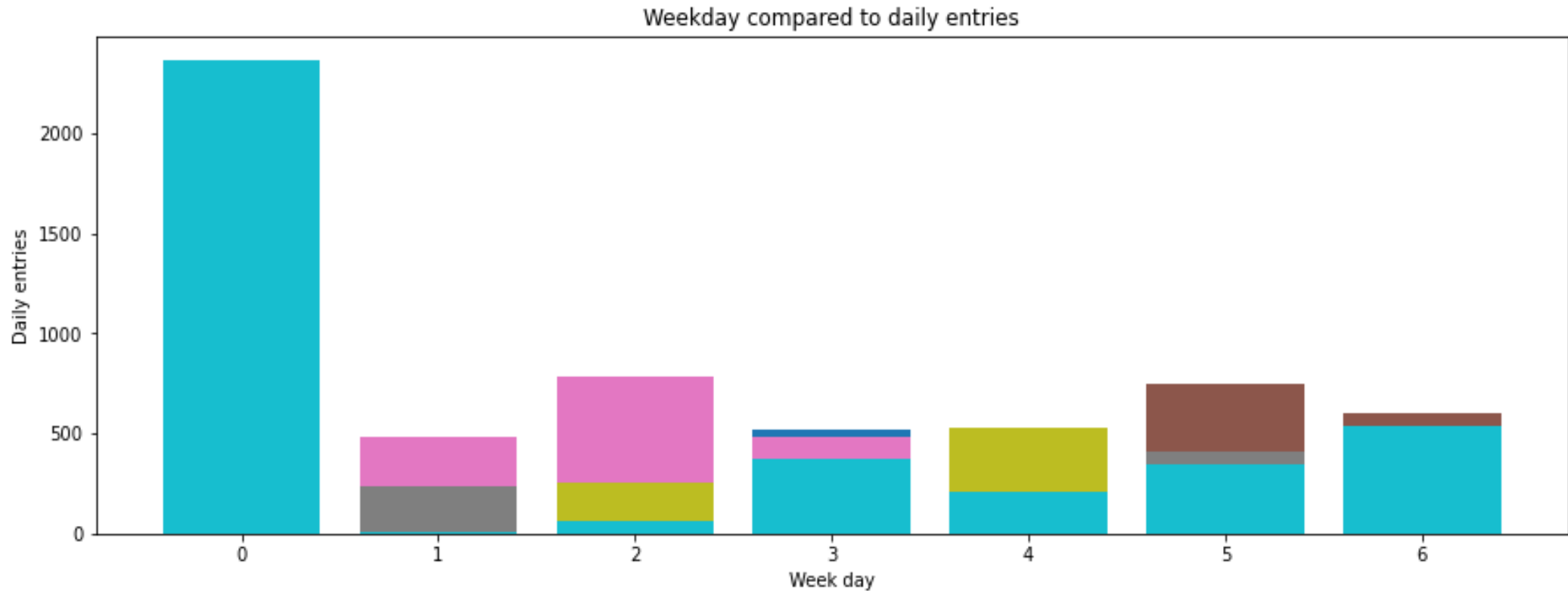
SQLite



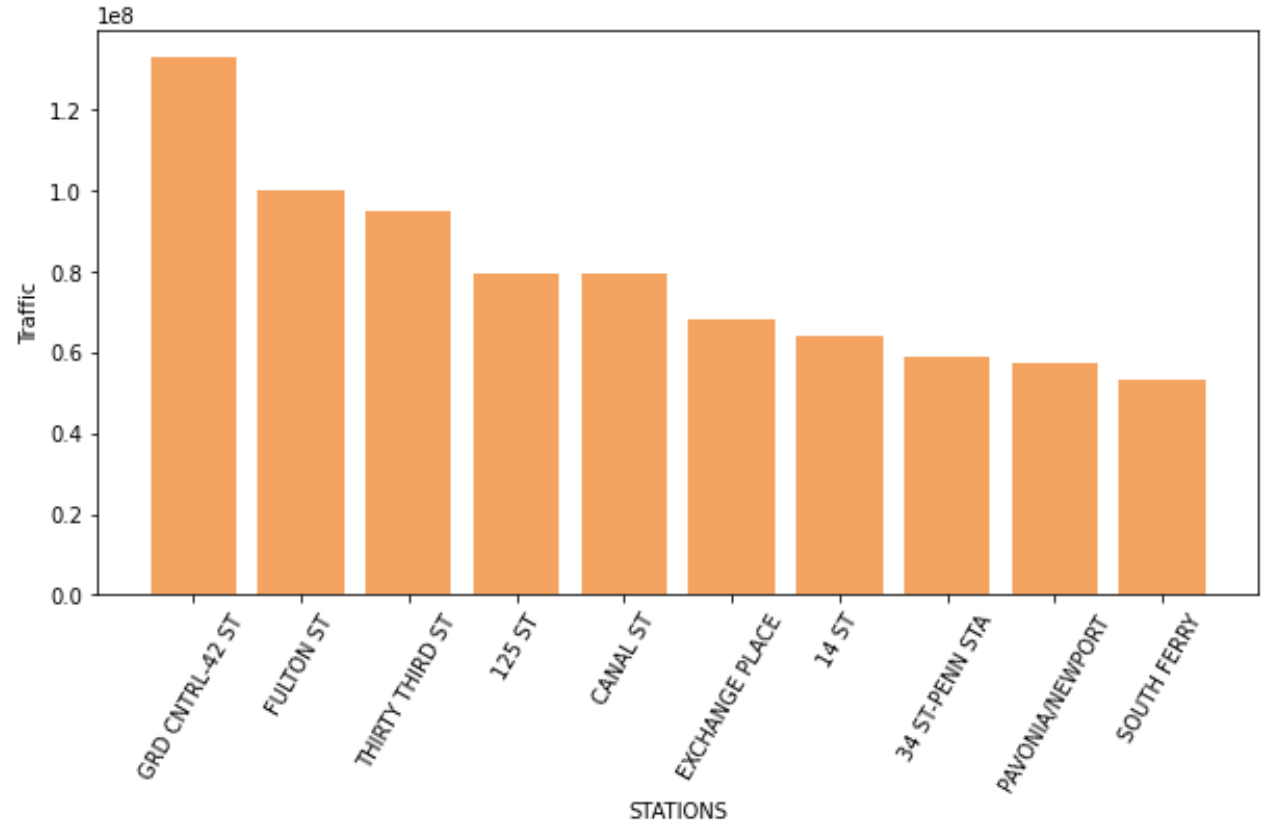
SQL3

# PLOTTING A SINGLE STATIONS

(RIT-ROOSEVELT), BY ENTRIES DAILY IN A 10-WEEK PERIOD



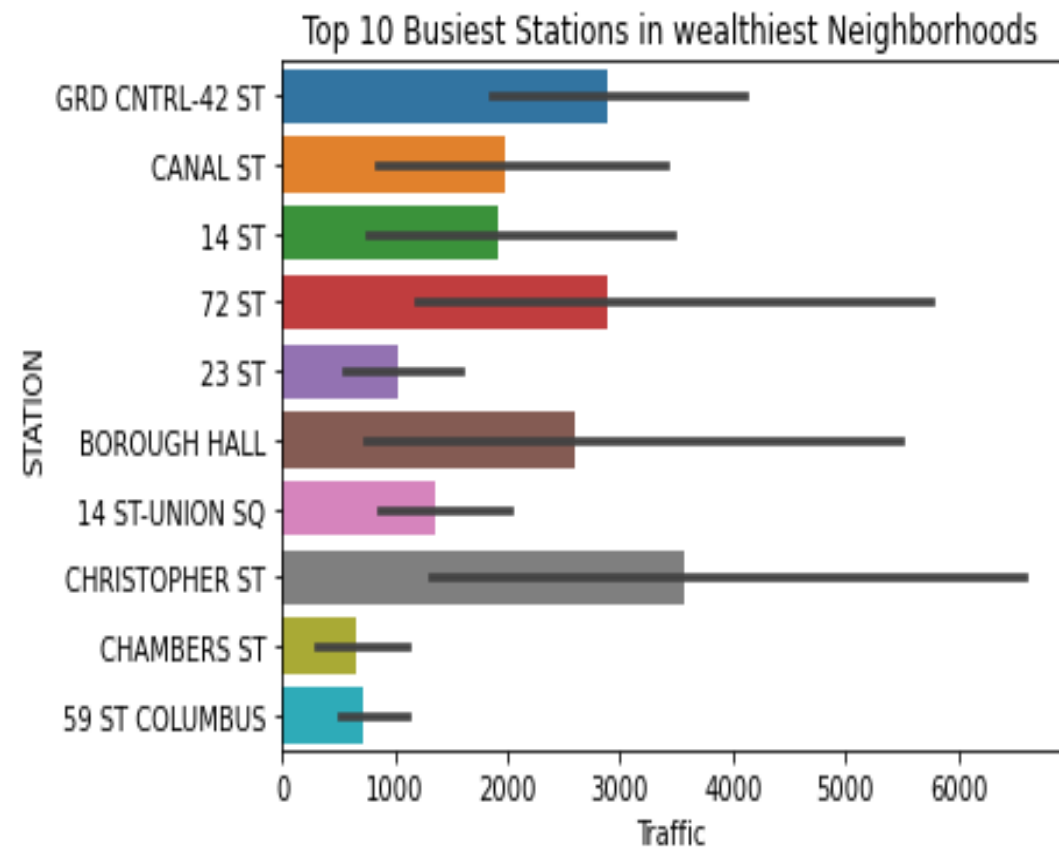
# TOP 10 BUSIEST STATIONS IN THE CITY





# TOP 10 BUSIEST STATIONS

in wealthiest neighborhoods



# RECOMMENDATIONS

- Placement of volunteers near the top ten stations in these stations:
- GRD CNTRL-42 ST : high income regions around the stations.

In midtown Manhattan and service three lines



# RECOMMENDATIONS:

- 14 ST-UNION SQ: High income and high traffic because of shops, restaurants, cafes and there is a park near the station.
- 59th Street–Columbus Circle which service three different lines and have a great deal of traffic
- Chambers St which is located at the Lower Manhattan is full of hotels and the 9/11 memorial site.





THANKS FOR LISTENING😊

