



Holiday Delivery on the MTA

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4/2/21
Metis



New York City Subway

Introduction

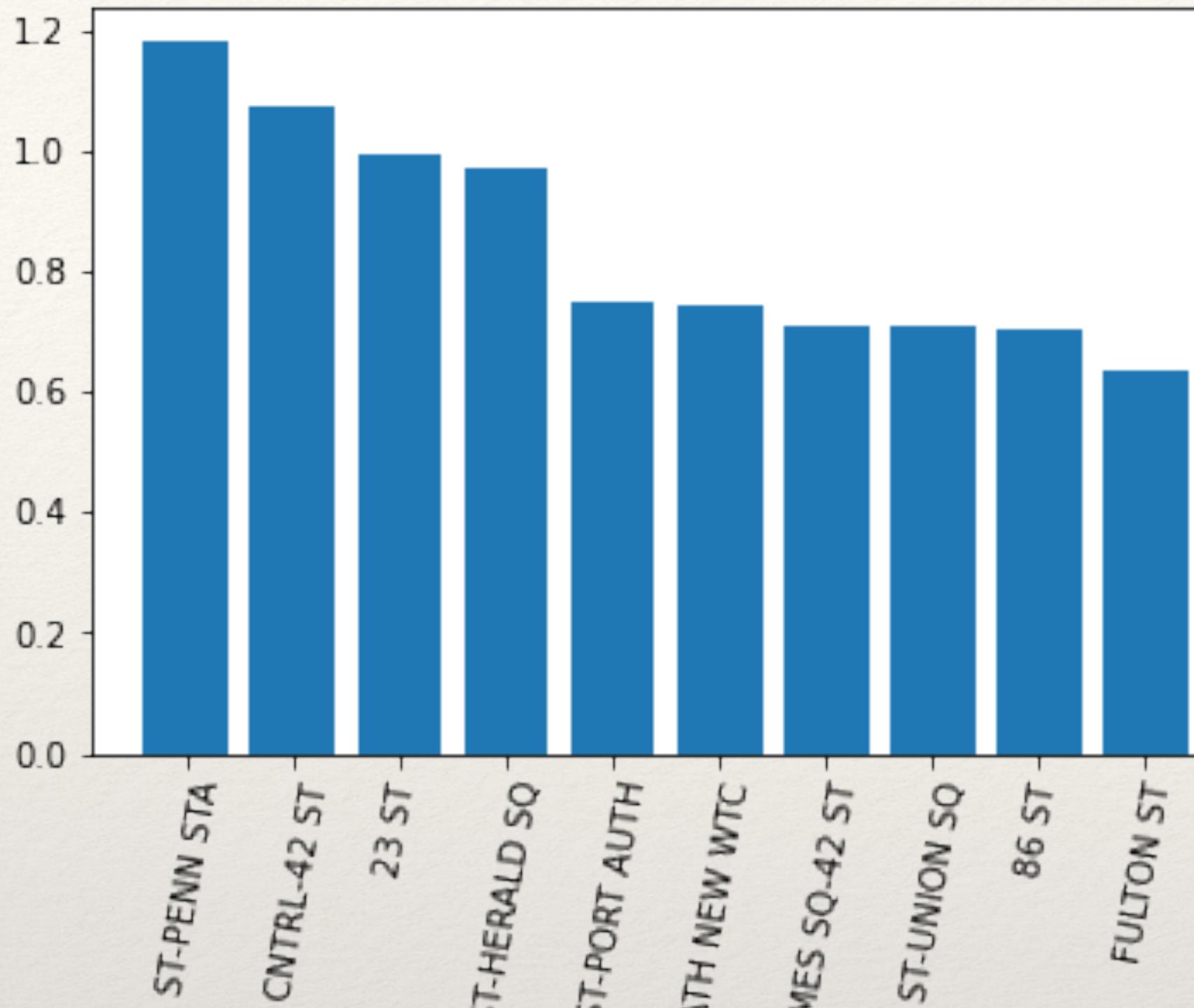
- ❖ Swift & Secure is a transport company offering delivery through the MTA
- ❖ The company would like to find the most popular MTA stations to begin their operation.
- ❖ Criteria: days with lowest entries/exits in the highest traffic stations across NYC

Question:

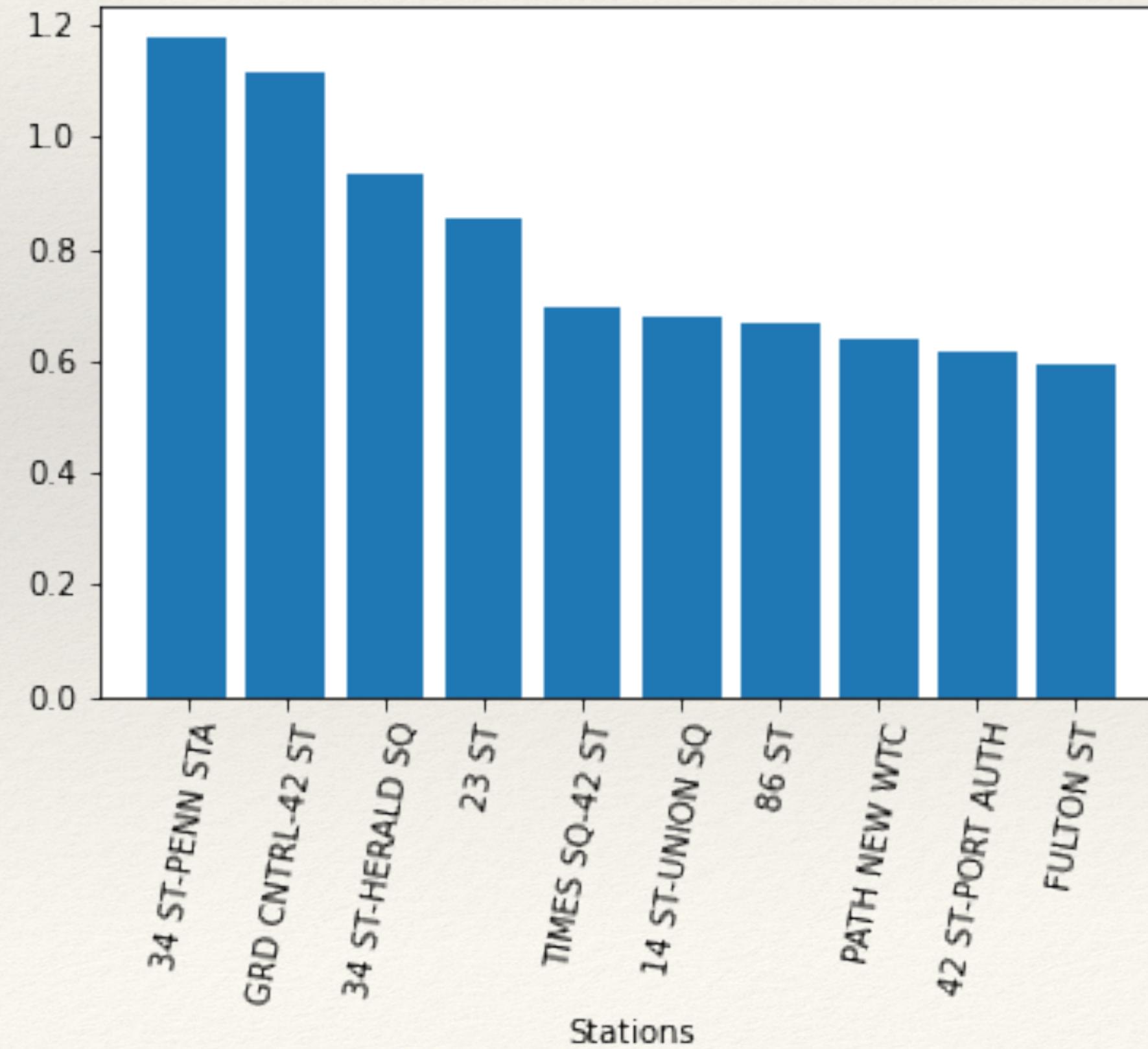
- ❖ What are the most utilized MTA Stations across New York City during the months of November, December, and January?

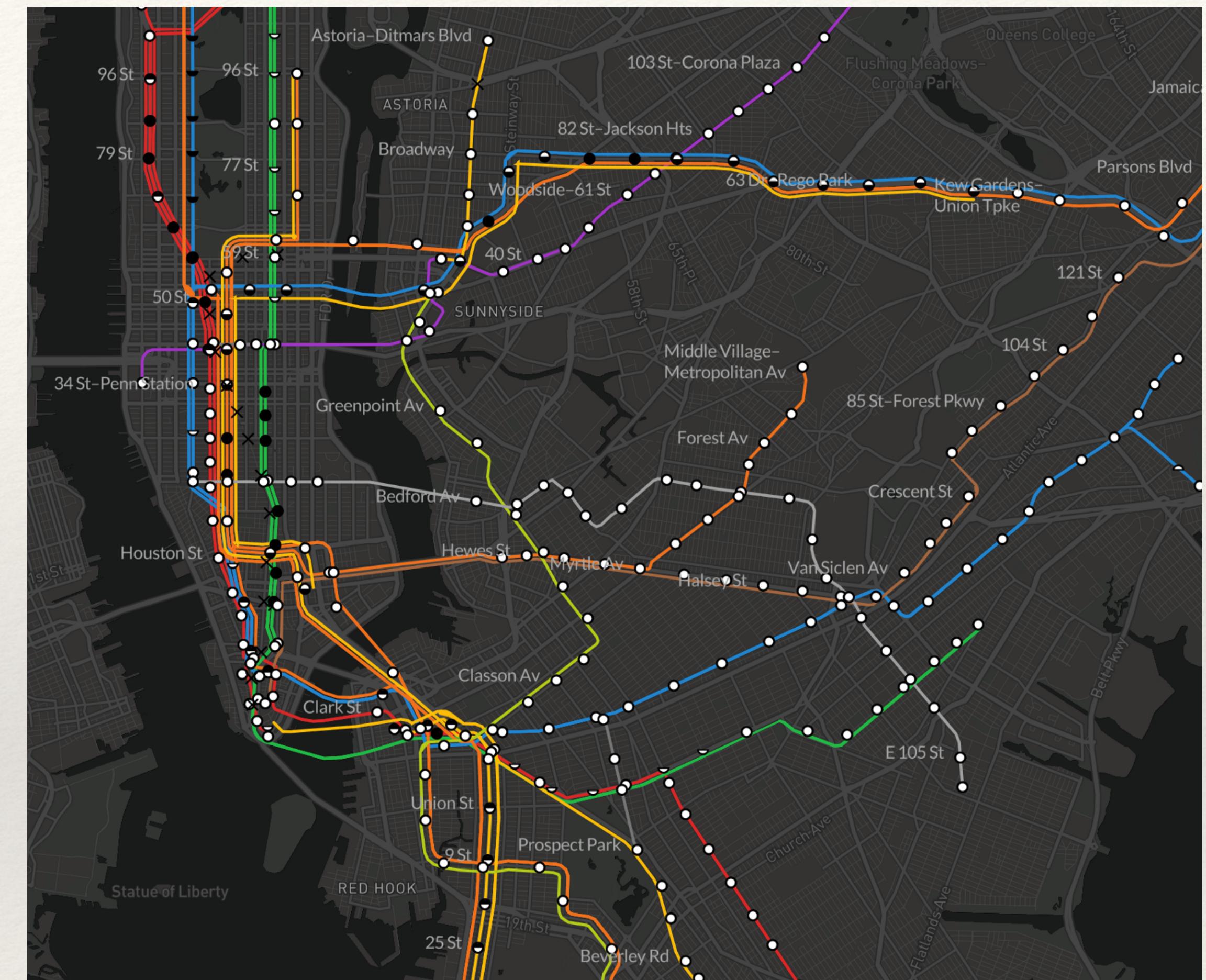
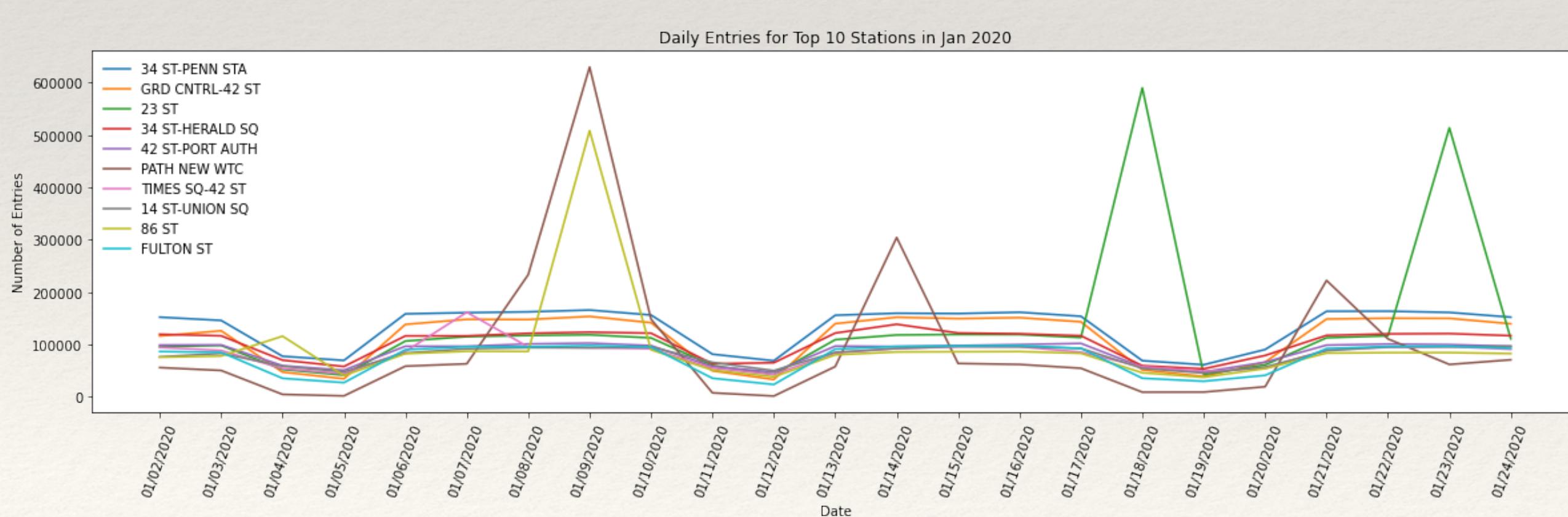
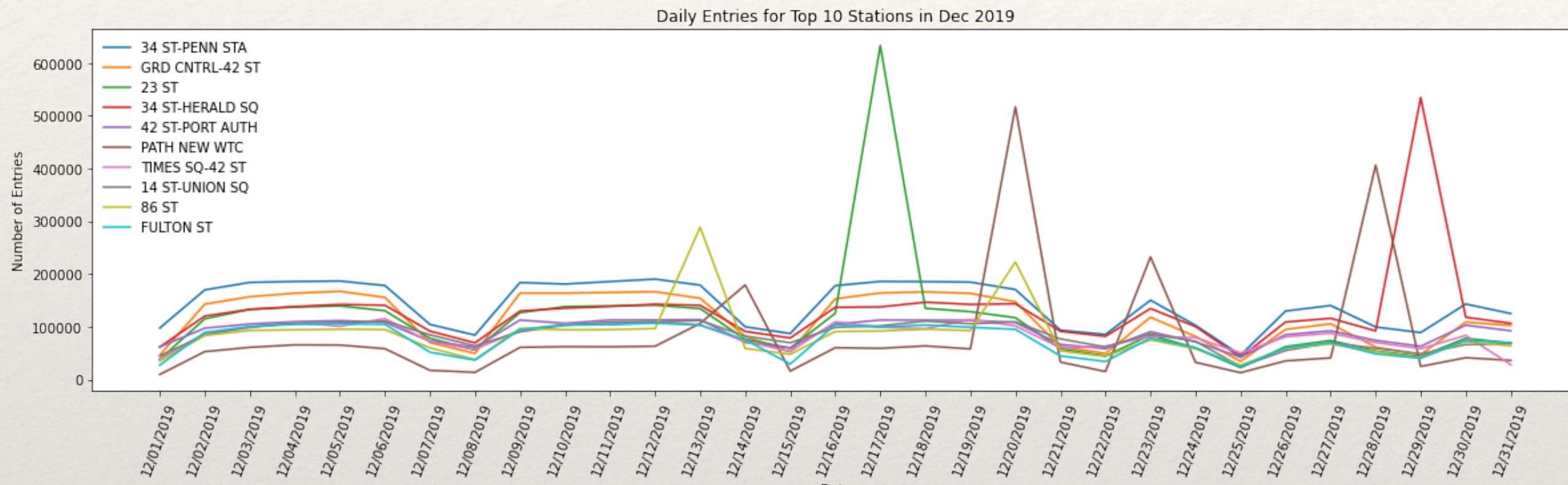
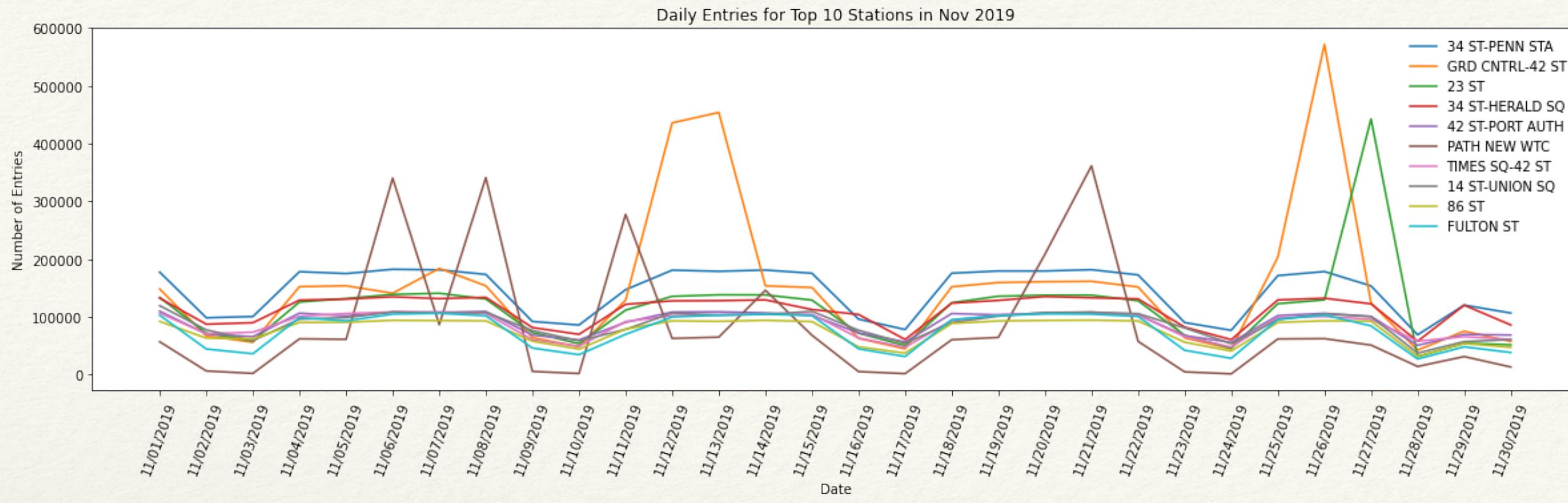


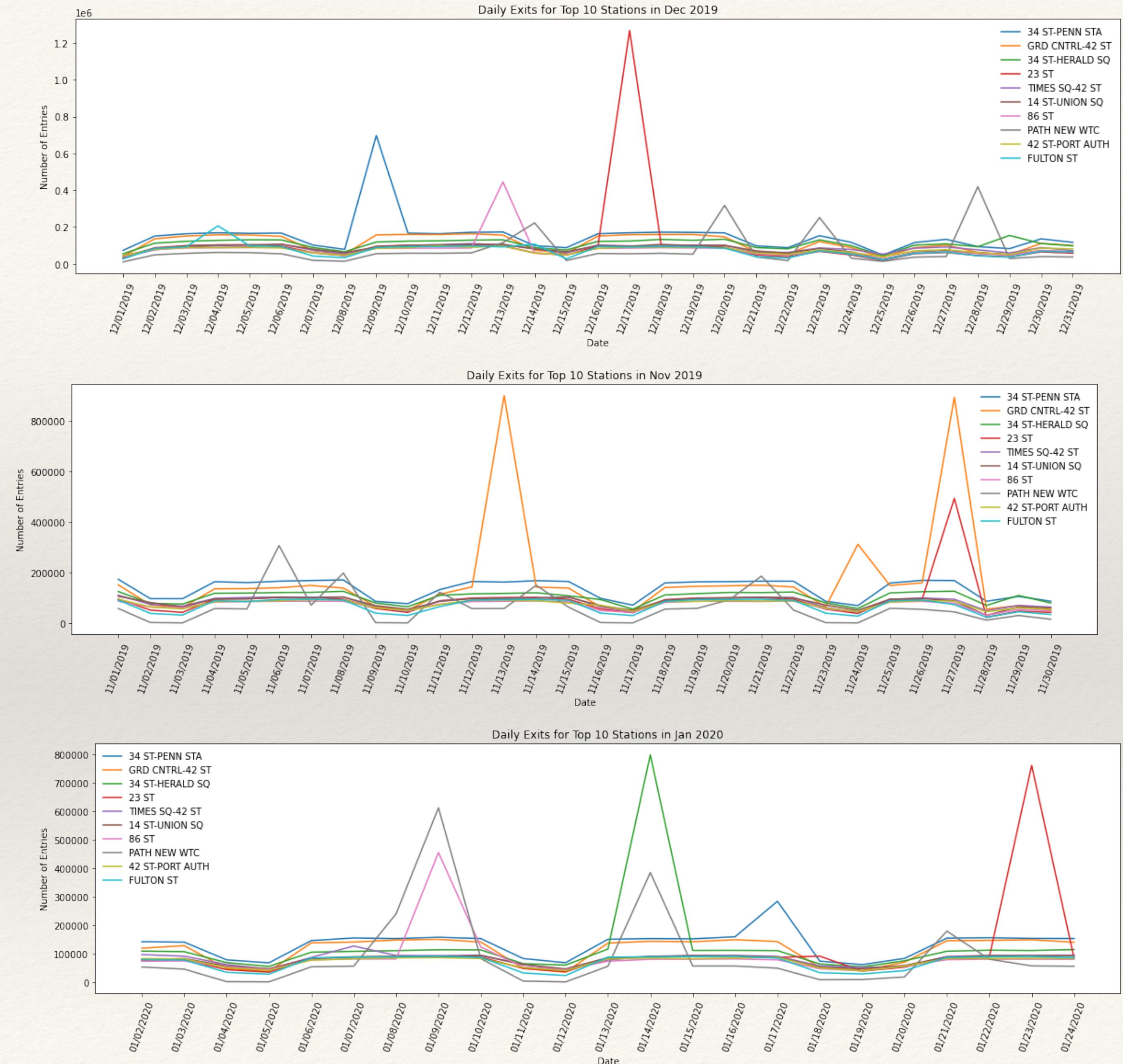
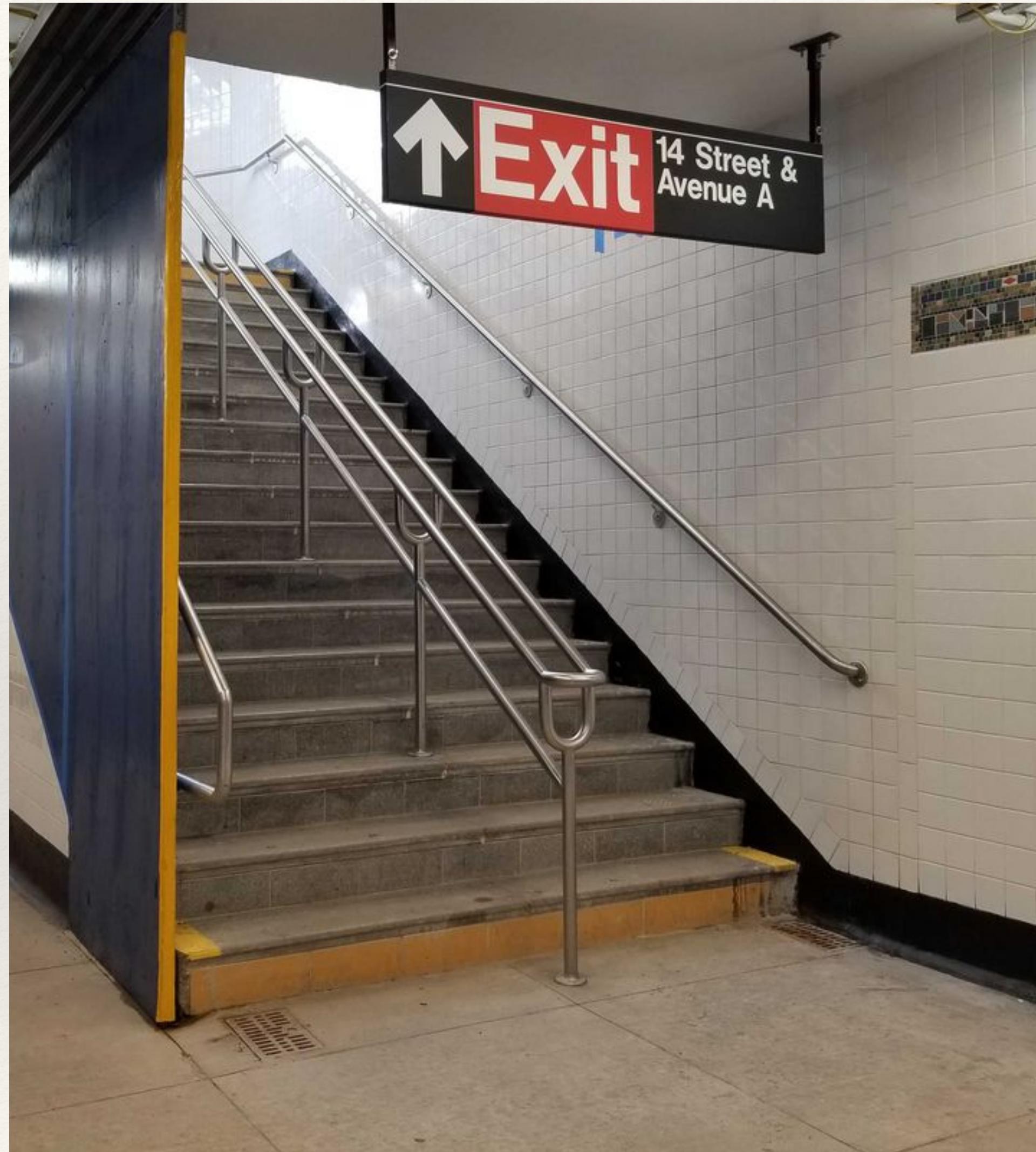
Top 10 Highest Entry Stations (Nov 2019 - Jan 2020)



Top 10 Highest Exit Stations (Nov 2019 - Jan 2020)





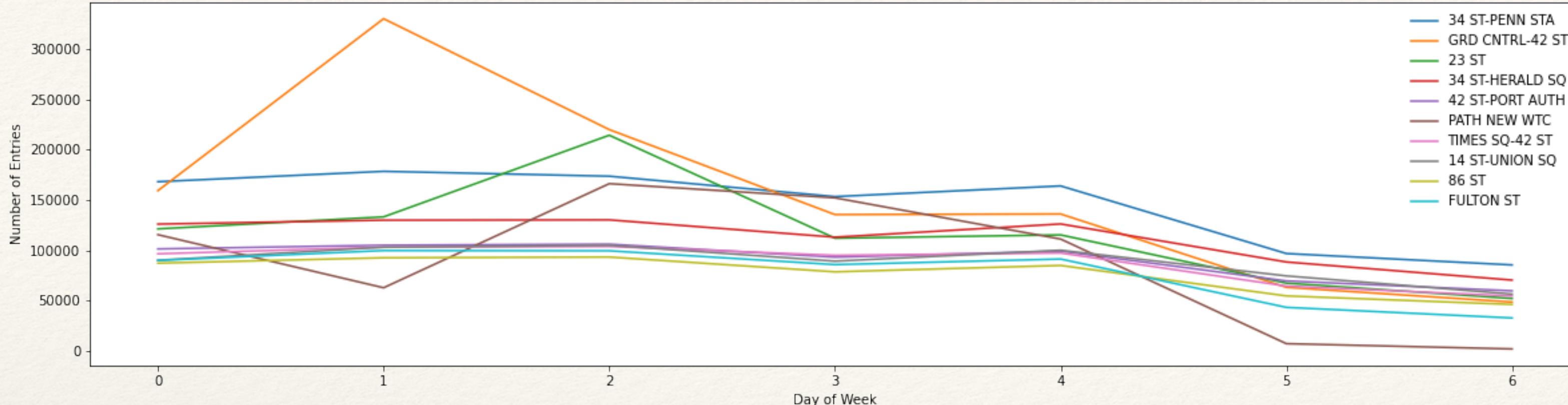


Question 2:

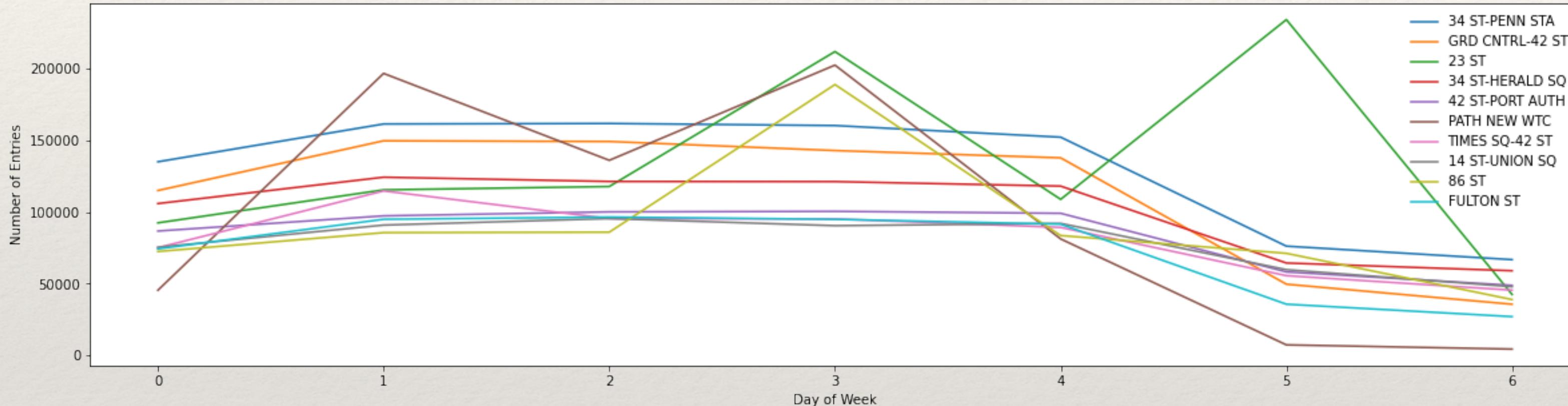
- ❖ For the most popular stations, what days have the lowest traffic?



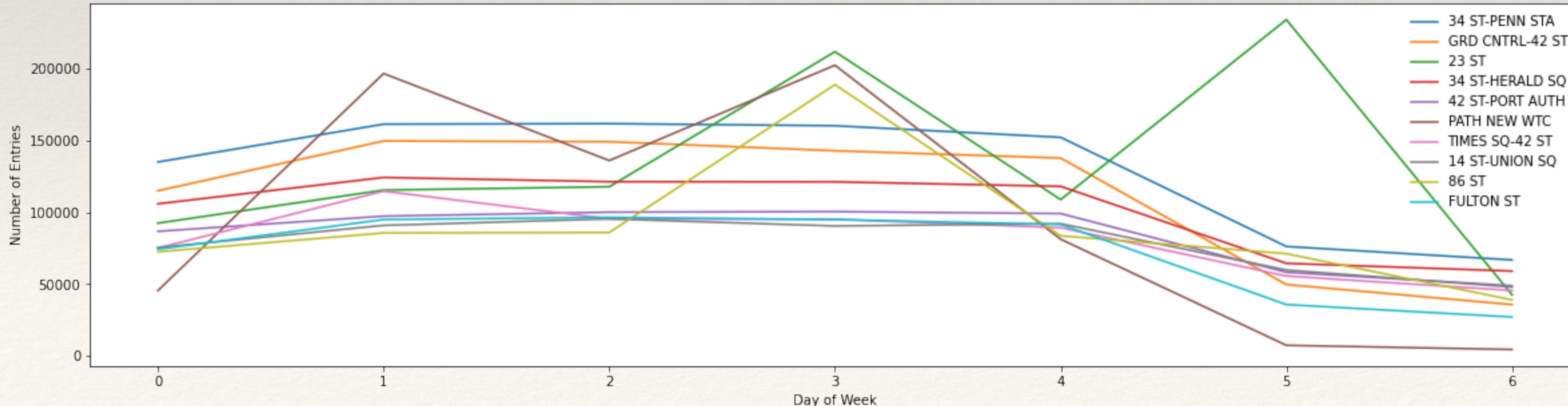
Day of Week Entries for Top 10 Stations in Nov 2019

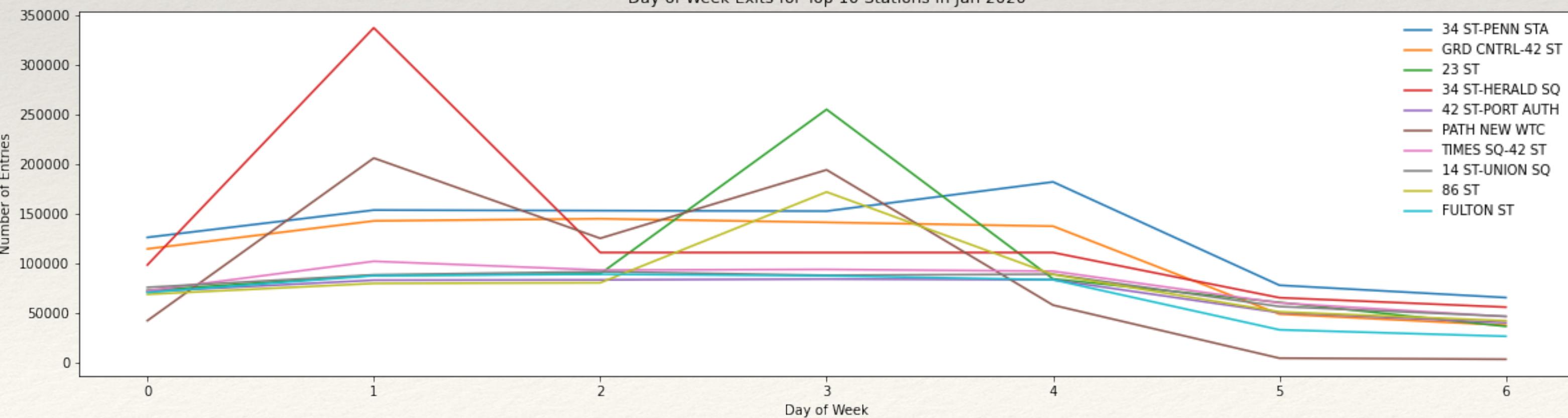
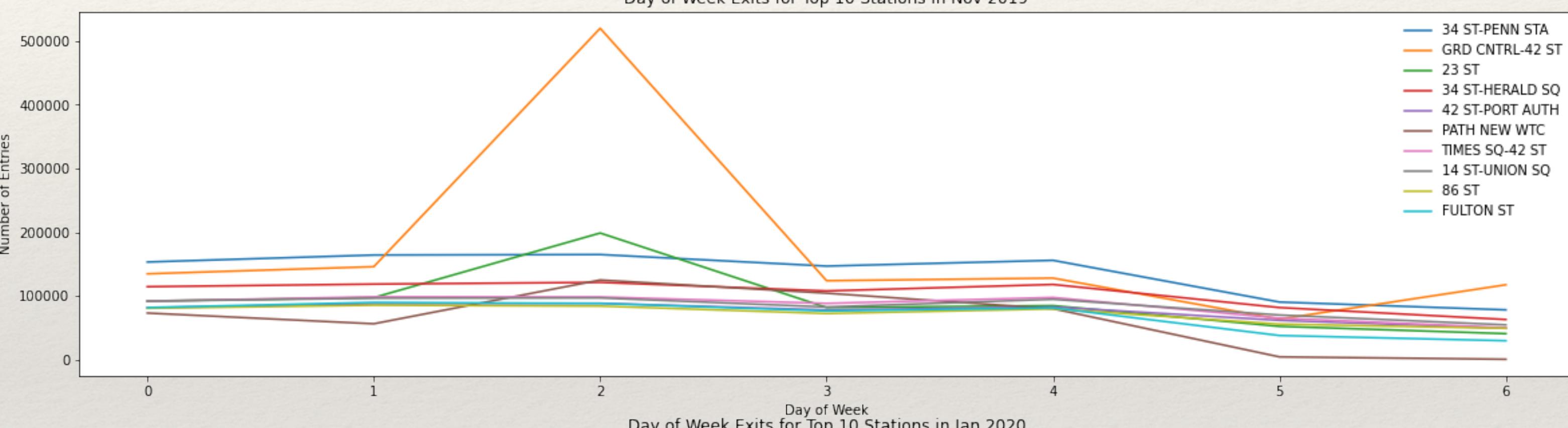
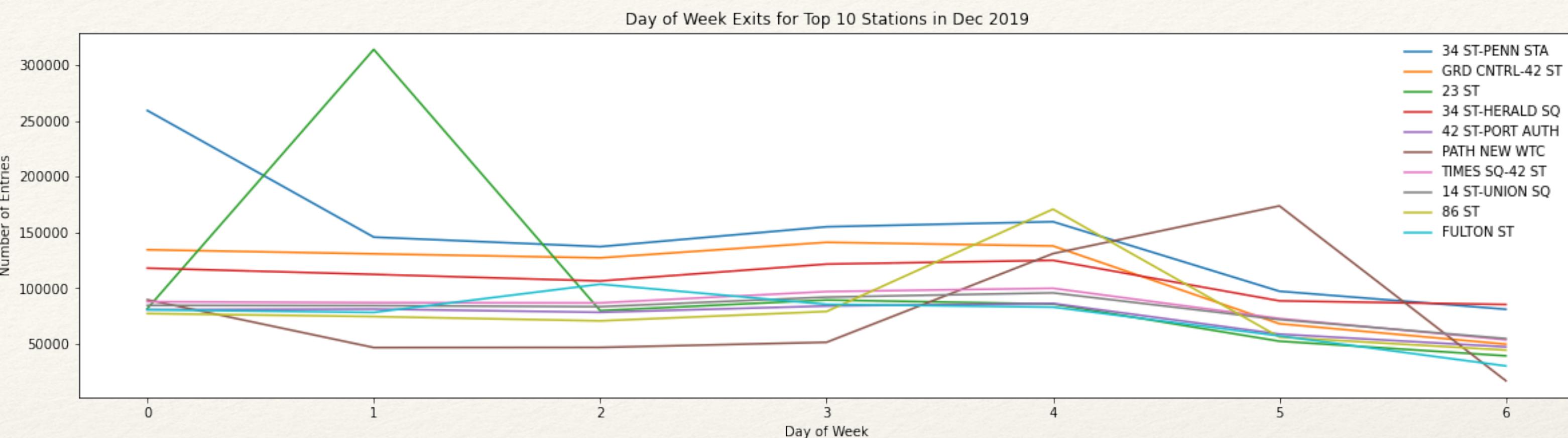


Day of Week Entries for Top 10 Stations in Jan 2020



Day of Week Entries for Top 10 Stations in Jan 2020



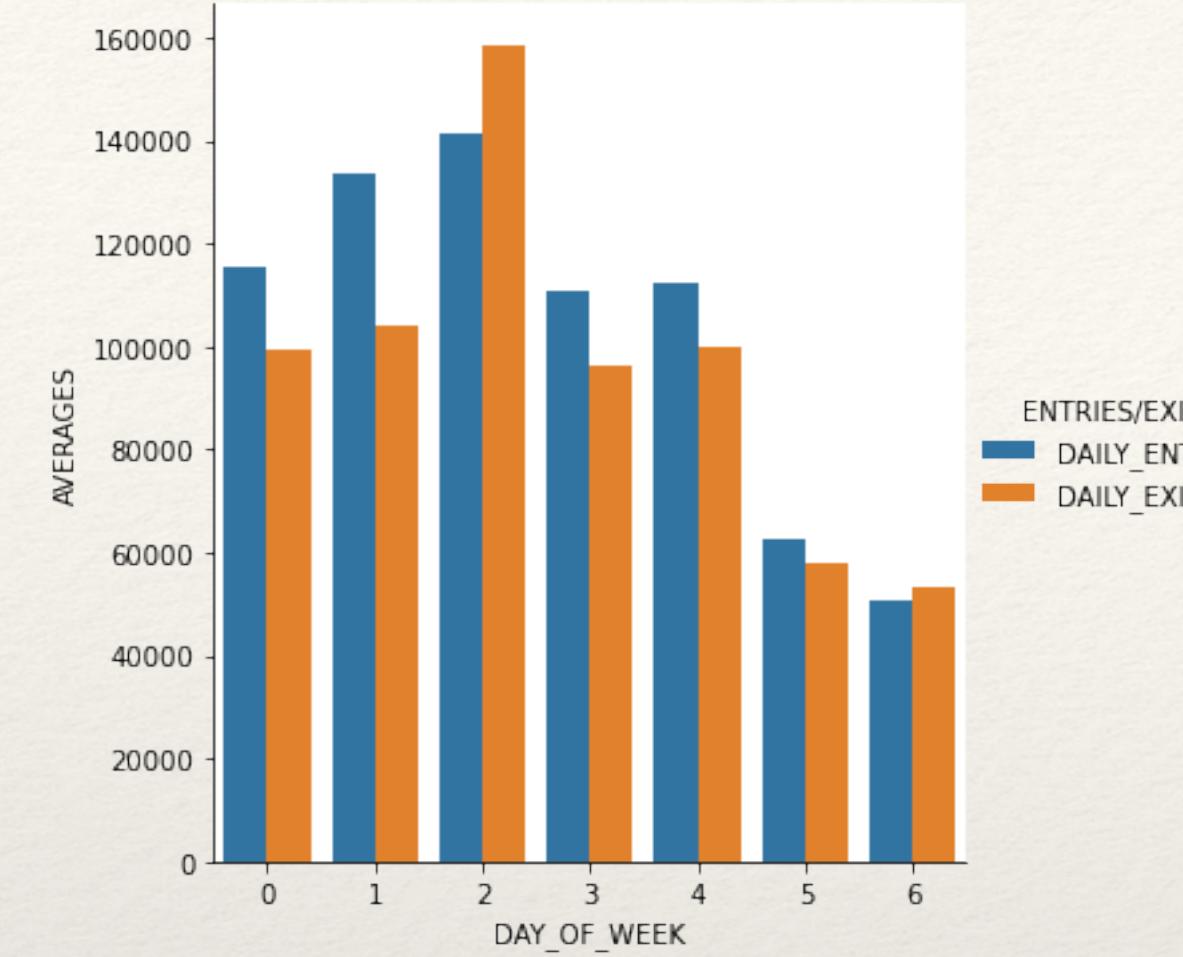


Observations:

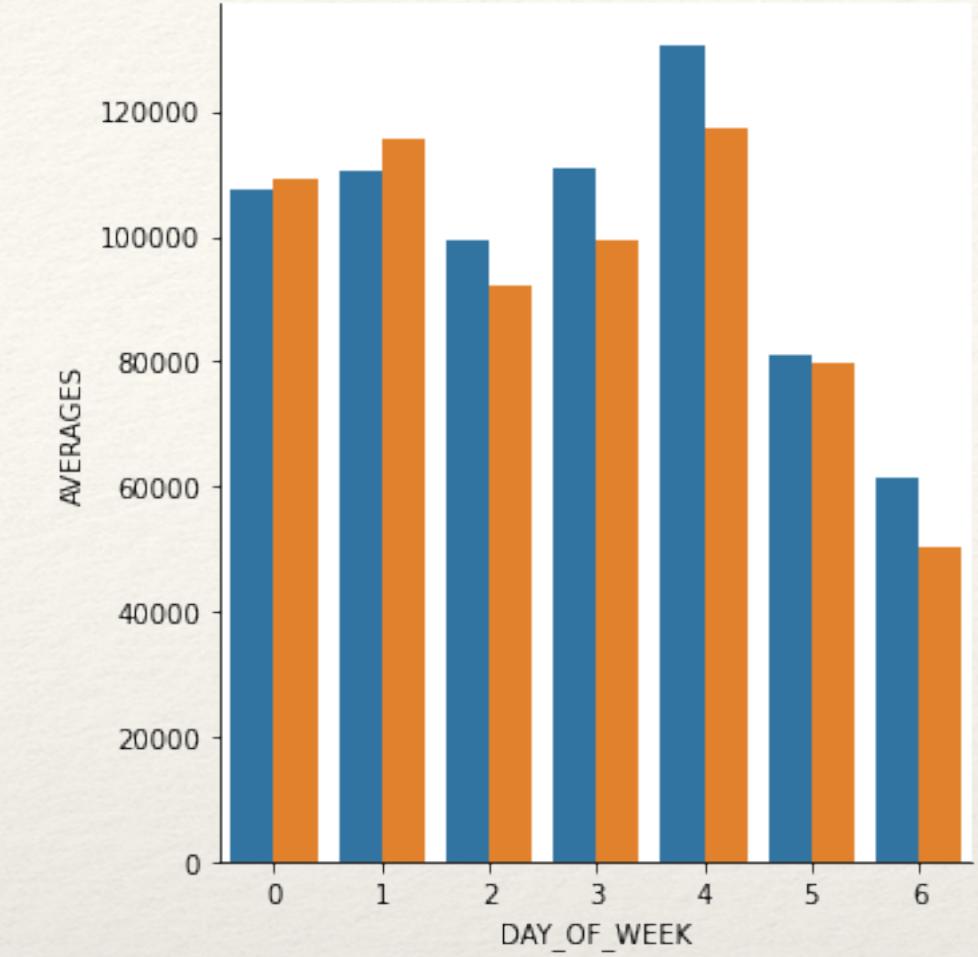
- ❖ The top 10 most popular stations between November and January have the lowest average foot traffic on the weekends.



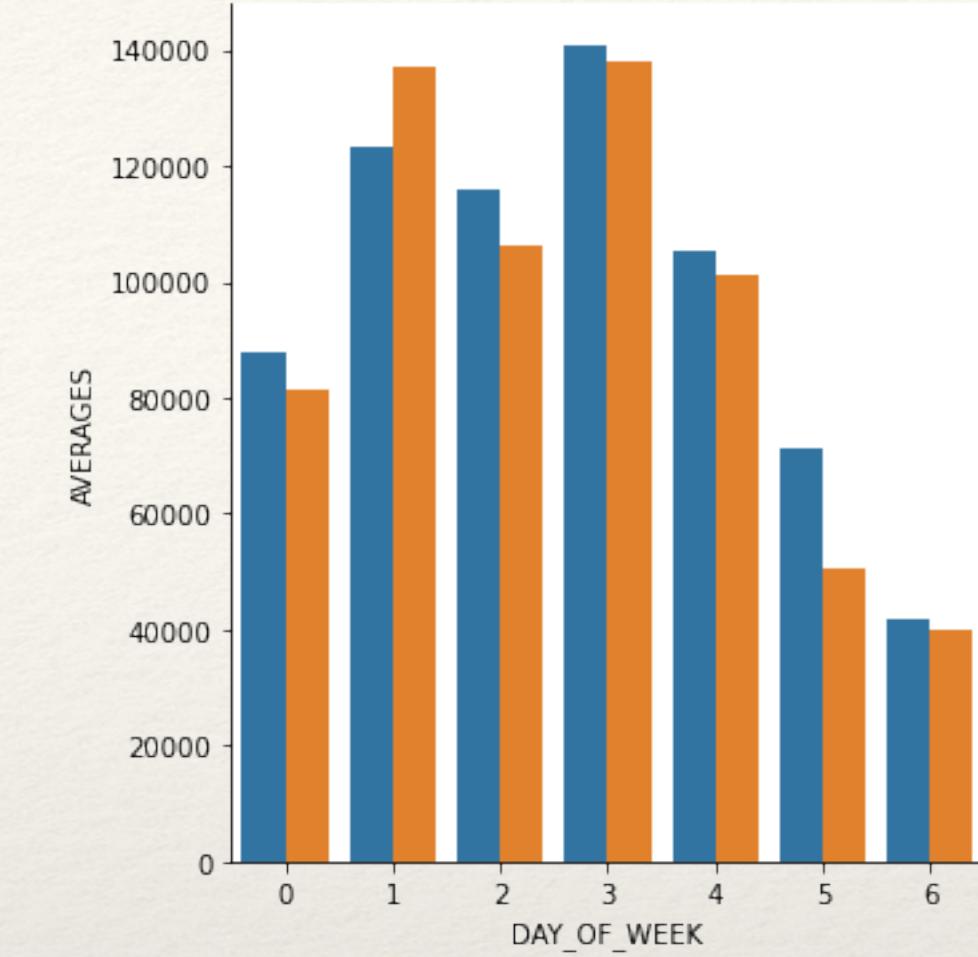
Avg Day of Week Entries/Exits Across Top 10 Stations in Nov 2019



Avg Day of Week Entries/Exits Across Top 10 Stations in Dec 2019



Avg Day of Week Entries/Exits Across Top 10 Stations in Jan 2020



Data & Tools

- ❖ Data:
 - ❖ MTA Turnstile Data: 3 Months (Nov 2019 -Dec 2020)
- ❖ Tools:
 - ❖ SQLite
 - ❖ SQLAlchemy
 - ❖ Python:
 - ❖ Pandas
 - ❖ Numpy
 - ❖ Datetime
 - ❖ Matplotlib
 - ❖ Seaborn