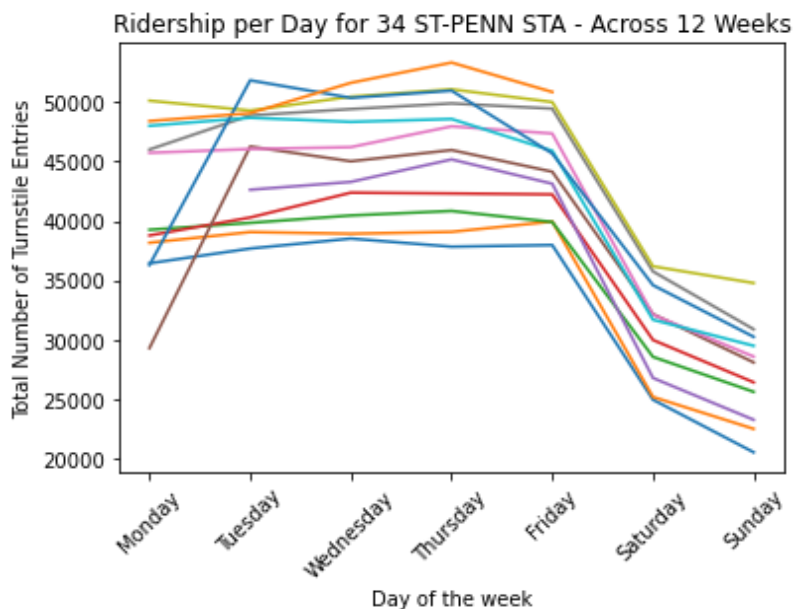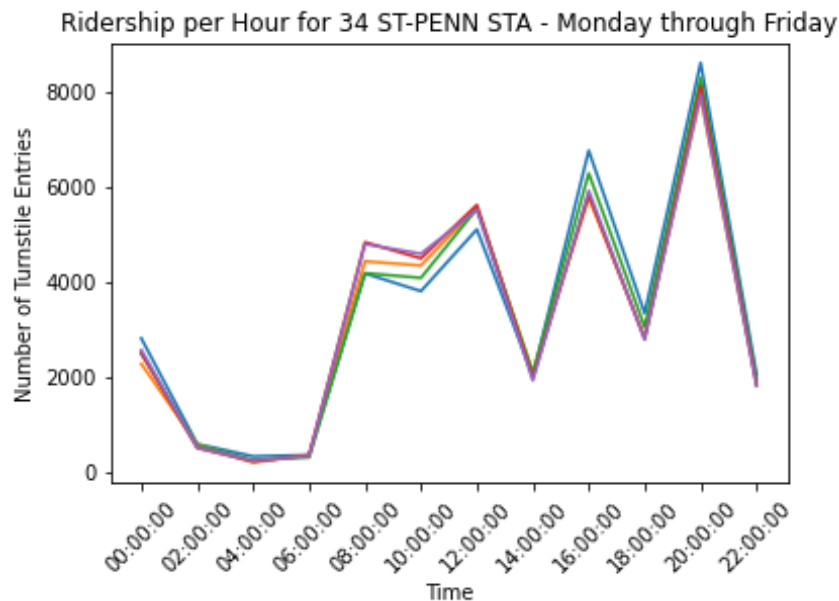# WomenTechWomenYes - MTA Turnstile Traffic Analysis

The goal of this project is to determine where and when to strategically locate street teams at the entrances of New York's subway station to collect the most email addresses. To determine this objective, I have to determine which station has the most entry traffic. Based on MTA turnstile data (New York's subway) of 12 weeks, the top 10 subway station by entrance is as follows:

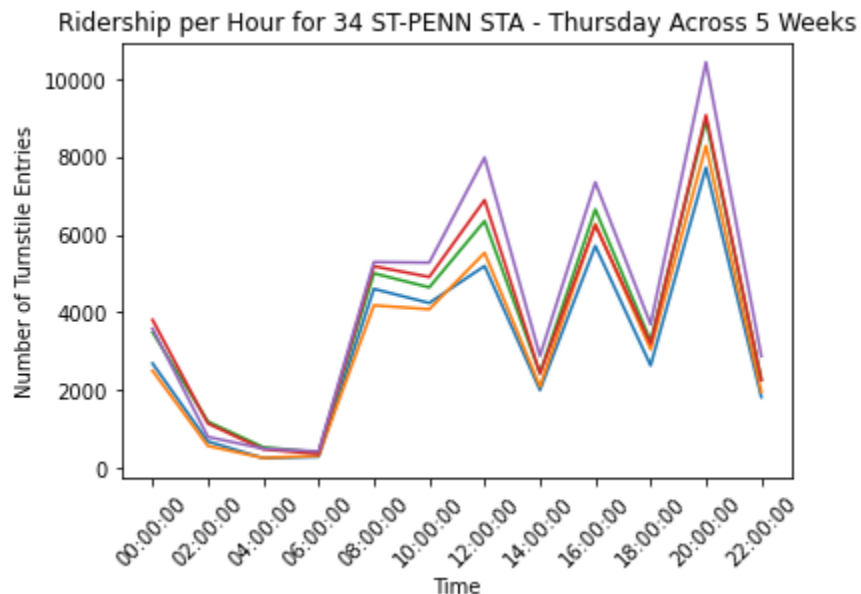|	STATION	DAILY_ENTRIES
61	34 ST-PENN STA	3638541.0
59	34 ST-HERALD SQ	2756231.0
110	86 ST	2706856.0
233	GRD CNTRL-42 ST	2674181.0
315	PATH NEW WTC	2653113.0
14	14 ST-UNION SQ	2436087.0
46	23 ST	2354158.0
9	125 ST	2295090.0
68	42 ST-PORT AUTH	2270695.0
226	FULTON ST	1978004.0

To explore which day has the best traffic across the day of the week, I plotted the number of turnstile entries per day from 12 weeks of data. See below. The chart below suggests that Monday through Friday is equally a good day to obtain our objective.

Furthermore, I plotted the number of turnstile entries at 34 ST-PENN STA per hour from Monday through Friday from a random week. See below. The chart below suggests that 8:00 AM through 12:00 PM, 4:00PM, and 8:00PM is the best time to obtain our objective.

Ridership per Hour for 34 ST-PENN STA - Monday through Friday

Finally, I plotted the number of turnstile entries at 34 ST-PENN STA per hour from Thursday from five random weeks. See below. The chart below suggests that 8:00 AM through 12:00 PM, 4:00PM, and 8:00PM is the best time to obtain our objective.

Ridership per Hour for 34 ST-PENN STA - Thursday Across 5 Weeks

This result suggests that the top five stations are 34 ST-PENN STA, 34 ST-HERALD SQ, 86 ST, GRD CNTRL-42 ST, AND PATH NEW WTC. And, the best time to obtain our objective is anytime Monday through Friday at 8:00 AM through 12:00 PM, 4:00PM, and 8:00PM.