Feb 2020 Jersey City CitiBike Data Analysis:

Looking at the total number of rides on each day in Feb 2020, it looks like CitiBikes are rented more often on weekdays vs weekends, which is the opposite of what I originally anticipated. I thought of these bikes more as something families or couples use for recreation, or tourists use as a means of transportation to explore a new city.

We can break this down a little further, to analyze the average number of rides per day of the week and we see that it is true that CitiBikes were, in fact, rented more often during the week than on the weekend. Why might this be? Let's look even closer.

If we take a look at the Average Trip Duration per day of the week, we can see that the weekday CitiBike rentals are for a shorter amount of time vs the weekend rentals (other than Thursday but we will touch on that next). When plotting for Peak Hours, I found that CitiBikes were most often rented at 8am and also between 5 and 6pm, so it seems most riders are using these bikes as part of their work commute. Weekend rentals are for leisure, thus those rides last longer.

The Average Trip Duration was significantly higher on Thursdays, which seems inconsistent with the rest of the data that suggests trips during the week are, on average, shorter than trips taken on the weekends. However, if we look at our Average Trip Duration per day for the entire month, we can see that Feb 6 stands out among the rest with an incredibly high average. This tells me there was probably an outlier on that day, and that day was probably a Thursday. When I looked back at the data, this was an accurate assessment. One user stood out among the rest on that day, Thursday Feb 6, with a trip duration of about 6,000 mins.

When mapping the location of the most frequented bike rental stations, I found that the stations that were used the most were all located outside of subway stations. This trend aligns with what I would've expected.

When analyzing the breakdown of CitiBike riders by gender, I found that men make up by far the majority of Citibike riders. At first, I found this to be pretty surprising, I thought it would've been more equivalent. But when I pair this notion with my newfound perspective that CitiBikes seem to be used primarily as a means of transportation to work, perhaps men have an easier time riding bikes in their work clothes than women do.