

# Analyst Home Assignment

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# Structure

1. Dataset
2. Average trip duration change in minutes during the week
3. The highest average trip fare between different boroughs
4. Introducing subsidies

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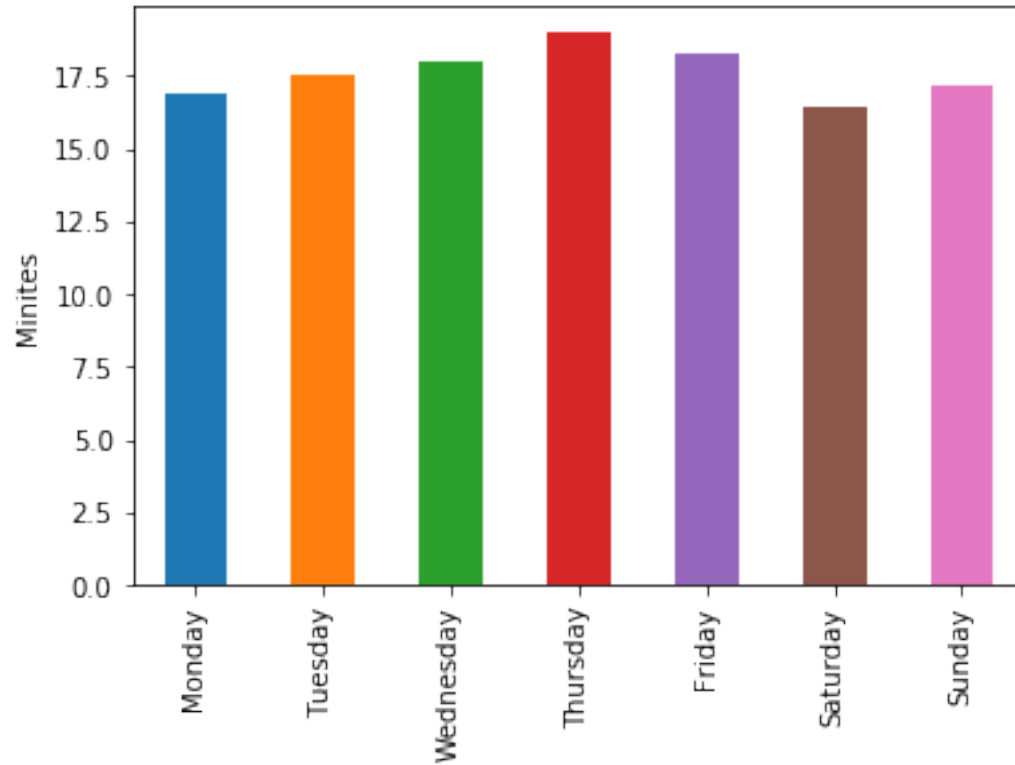
Dataset

# Dataset

- [http://www.nyc.gov/html/tlc/html/about/trip\\_record\\_data.shtm](http://www.nyc.gov/html/tlc/html/about/trip_record_data.shtm)  
|
- Yellow taxi dataset for June, 2018

Average trip duration  
change in minutes  
during the week

Average duration of trips per weekday

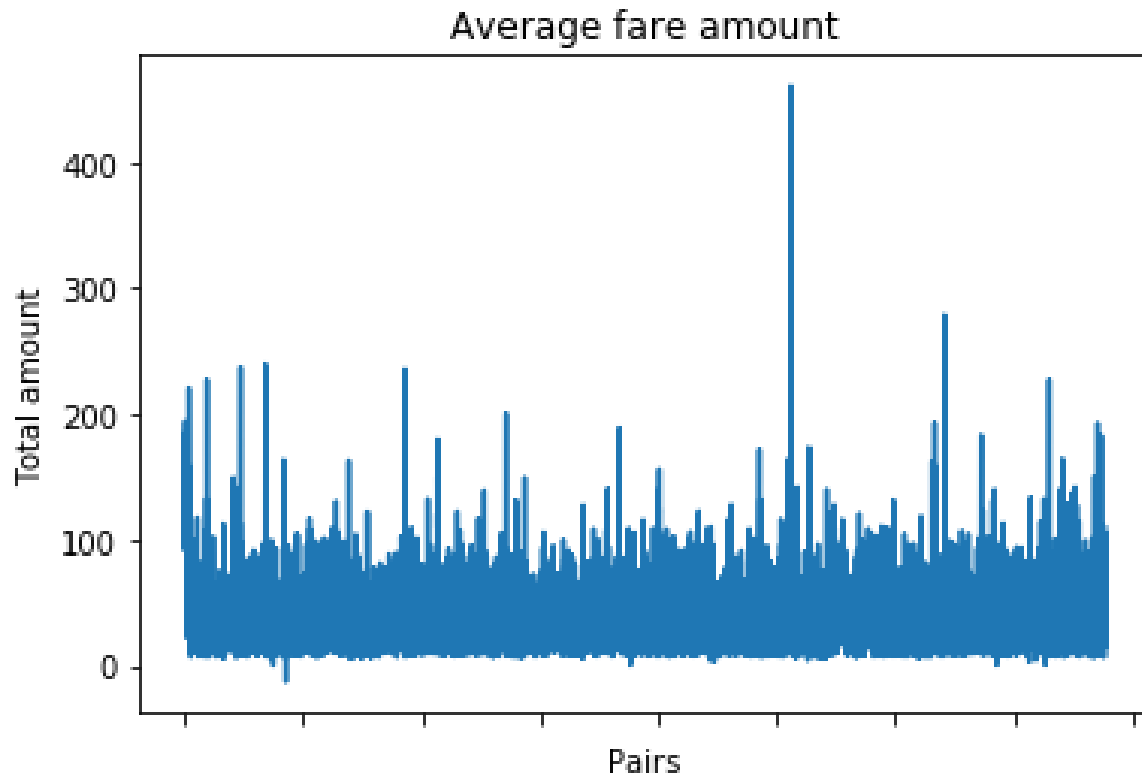


- Average duration of trips per weekday varies from 16 min to 19 min.
- The highest average duration of trips is on Thursday (approximately equals to 19 min).
- The smallest average duration of trips is on Saturday (approximately equals to 16 min).
- Further we can see duration increase between Monday and Thursday and decrease between Thursday and Saturday.

3

The highest average trip  
fare between different  
boroughs

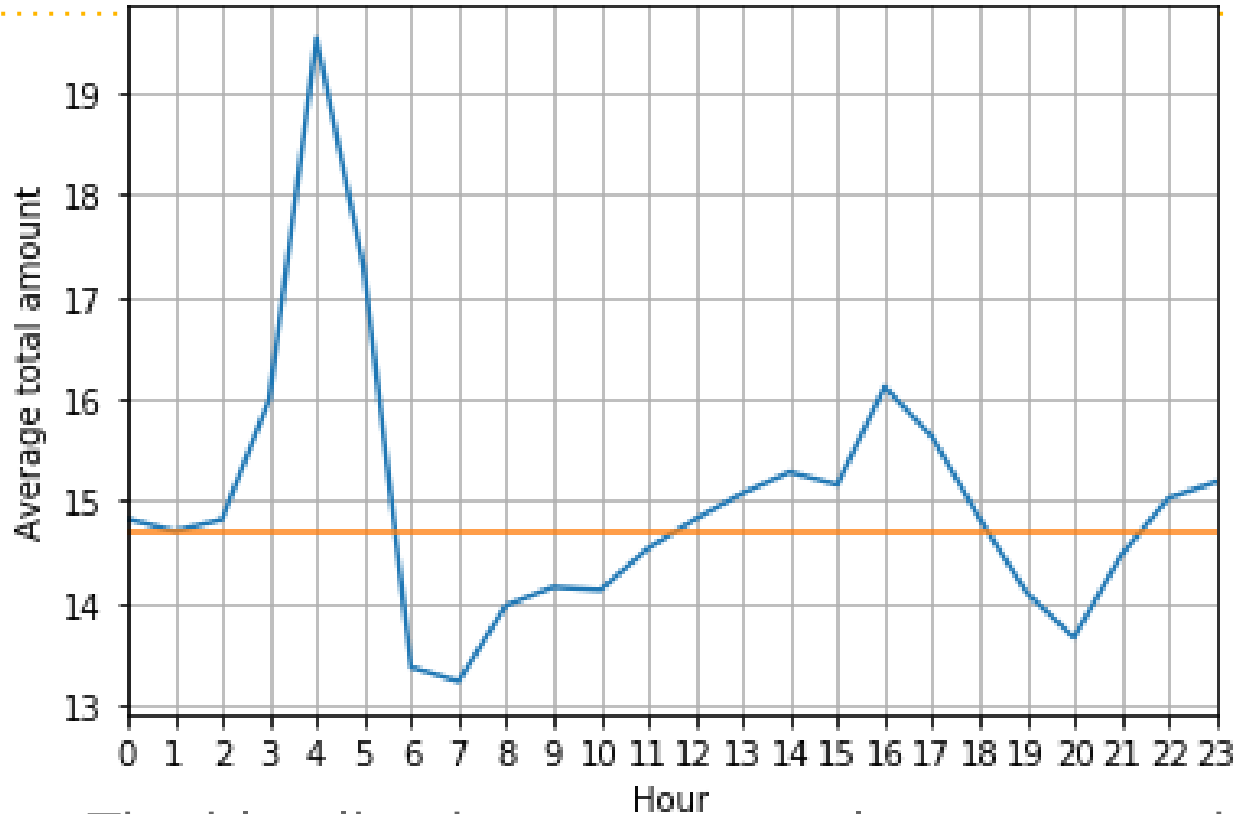




- (118, 265) results in the highest average trip fare which equals to 461.3 dollars
- 118 - Zone Heartland Village/Todt Hill (borough Staten Island)
- 265 - Zone NA

Introducing subsidies

## Difficult hours



- The blue line is average total amount per hour in June
- The orange line is average total amount in June

- $X \text{ per ride} = \text{Average total amount per hours} - \text{Average total amount per difficult hours}$
- $X \text{ per month} = X \text{ per ride} * \text{Average number of trips in difficult hours}$

- Problem evening hours are between 6 p.m. and 9 p.m.
- $X_{\text{per\_ride}} = 0.433\$$
- Total subsidies amount per month is 606837\$ (less than our budget \$6mln)



# Thanks!

**Any questions?**

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