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Zhenyu Wang

UBER DATA ANALYSIS



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Why?

**Chat with a Part time
Uber driver**

NYC UBER ANALYSIS

Goals

**Be the most efficient
Uber driver in NYC**

Data Description



Source: Kaggle

<https://www.kaggle.com/datasets/fivethirtyeight/uber-pickups-in-new-york-city>



Data set

Uber Pickups in New York City



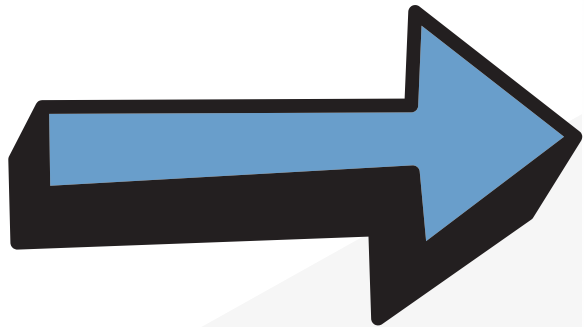
Shape

4534327, 4

DATA PREPROCESSING



	Date/Time	Lat	Lon	Base
0	9/1/2014 0:01:00	40.2201	-74.0021	B02512
1	9/1/2014 0:01:00	40.7500	-74.0027	B02512
2	9/1/2014 0:03:00	40.7559	-73.9864	B02512
3	9/1/2014 0:06:00	40.7450	-73.9889	B02512
4	9/1/2014 0:11:00	40.8145	-73.9444	B02512

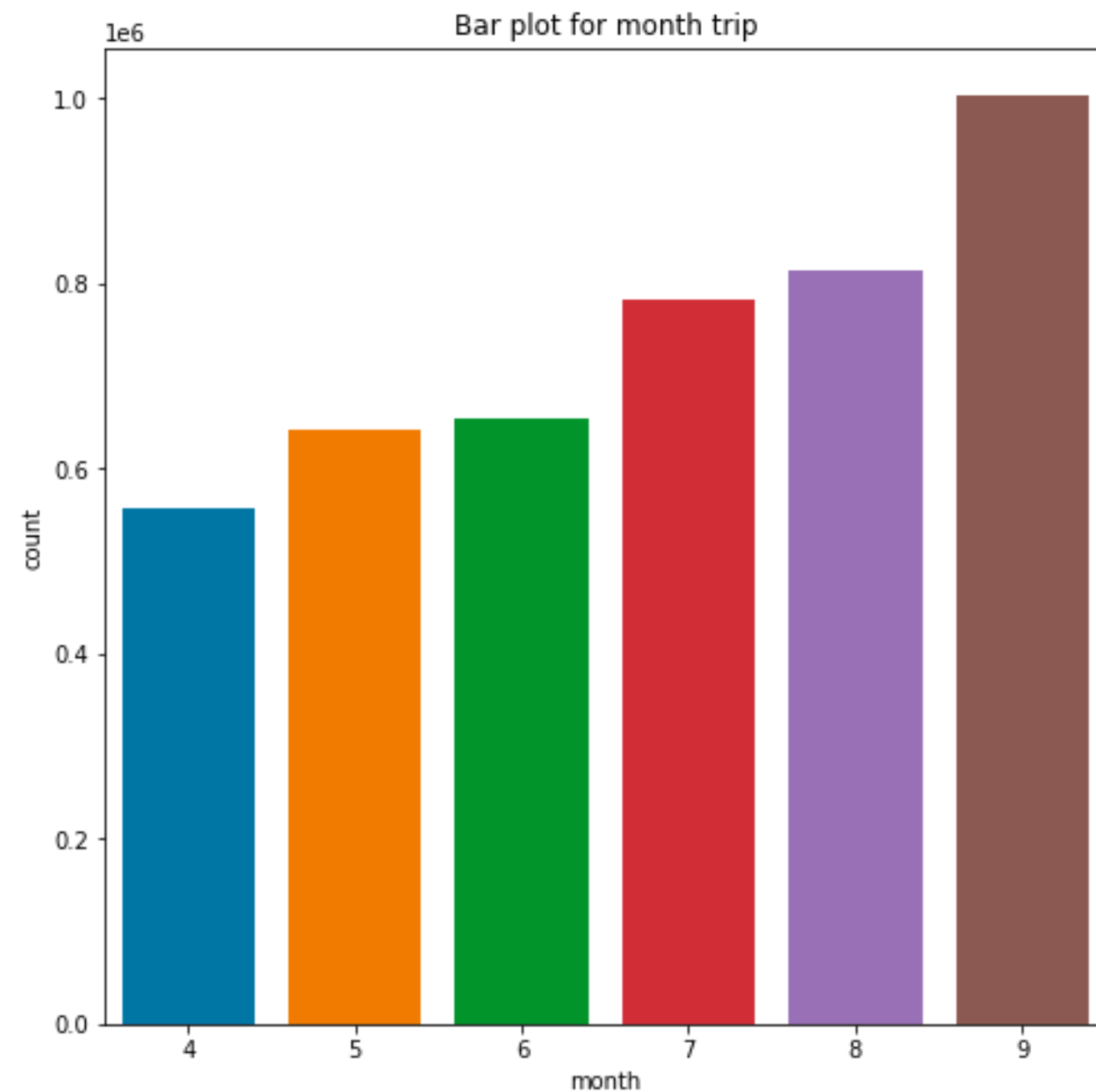


	Date/Time	Lat	Lon	Base	month	weekday	day	hour	minute
0	2014-09-01 00:01:00	40.2201	-74.0021	B02512	9	Monday	1	0	1
1	2014-09-01 00:01:00	40.7500	-74.0027	B02512	9	Monday	1	0	1
2	2014-09-01 00:03:00	40.7559	-73.9864	B02512	9	Monday	1	0	3
3	2014-09-01 00:06:00	40.7450	-73.9889	B02512	9	Monday	1	0	6
4	2014-09-01 00:11:00	40.8145	-73.9444	B02512	9	Monday	1	0	11
...
652430	2014-05-31 23:45:00	40.7309	-74.0014	B02764	5	Saturday	31	23	45
652431	2014-05-31 23:52:00	40.7528	-73.9798	B02764	5	Saturday	31	23	52
652432	2014-05-31 23:55:00	40.7158	-73.9519	B02764	5	Saturday	31	23	55
652433	2014-05-31 23:56:00	40.6961	-73.8997	B02764	5	Saturday	31	23	56
652434	2014-05-31 23:59:00	40.7393	-73.9919	B02764	5	Saturday	31	23	59

4534327 rows x 9 columns



ANALYSIS BY MONTH



Analysis of which month has maximum rides

9 1004099

8 813393

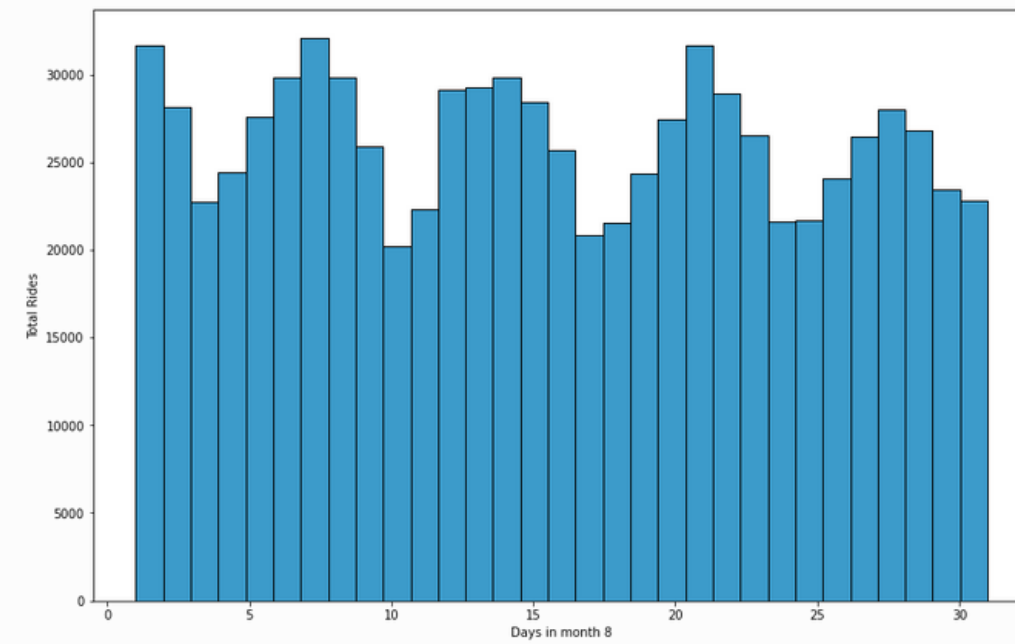
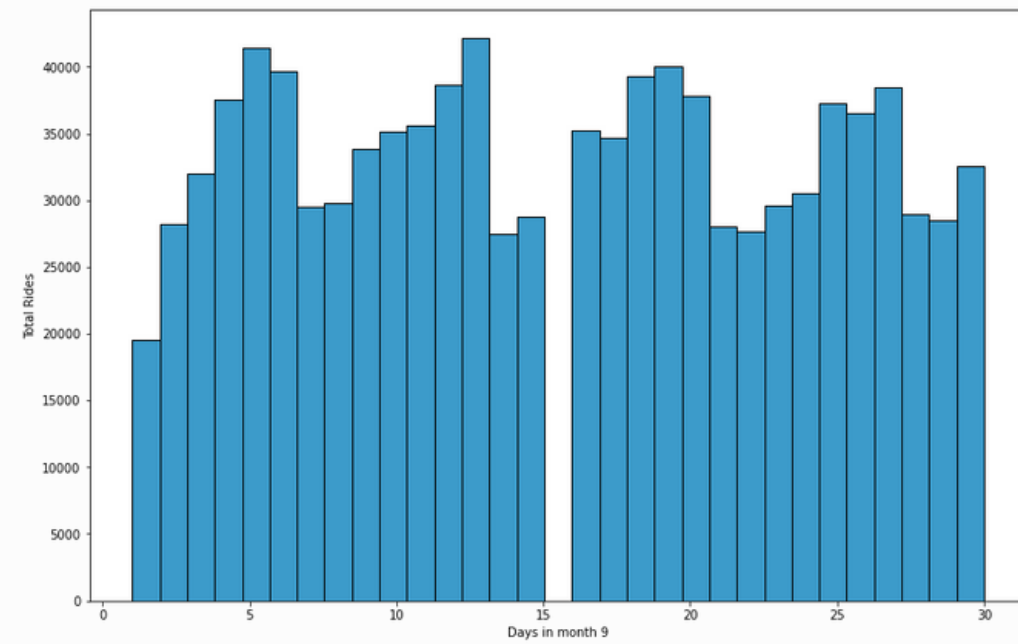
7 781969

6 653158

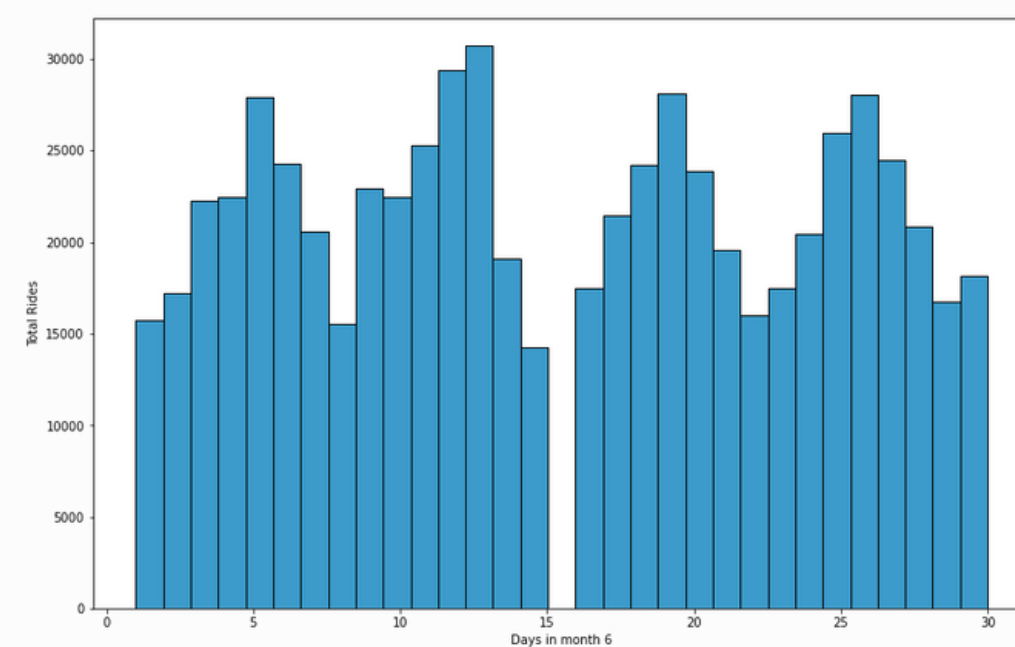
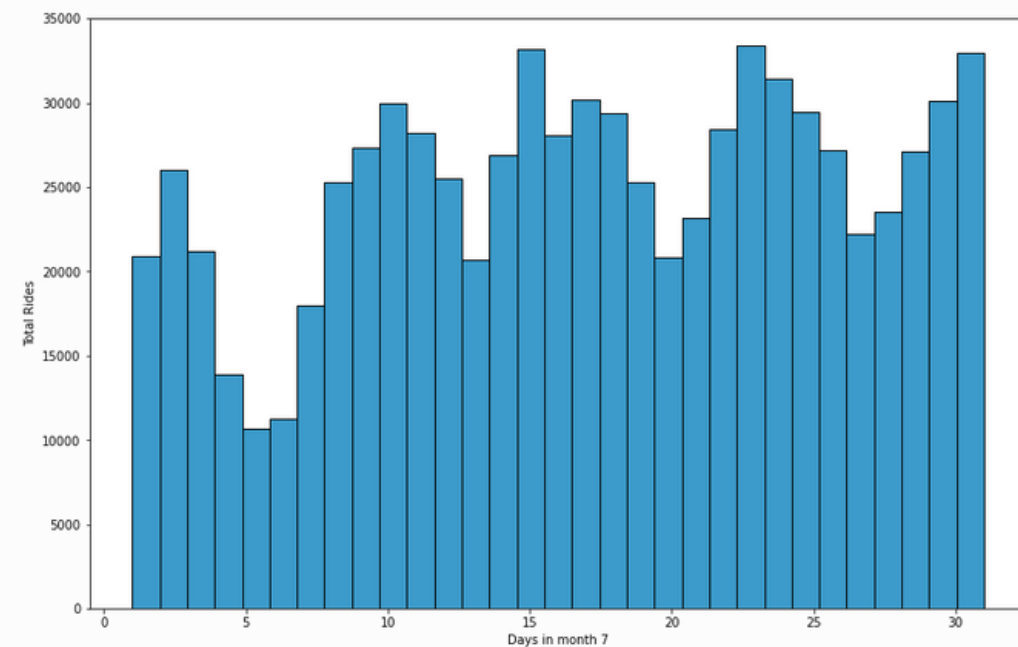
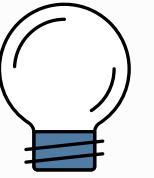
5 642360

4 556767

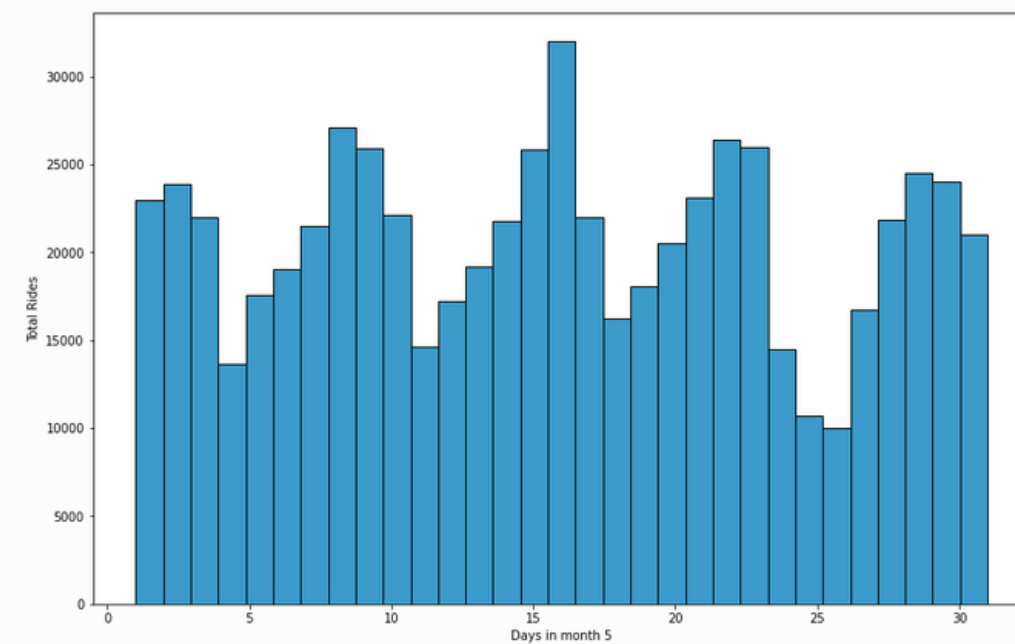
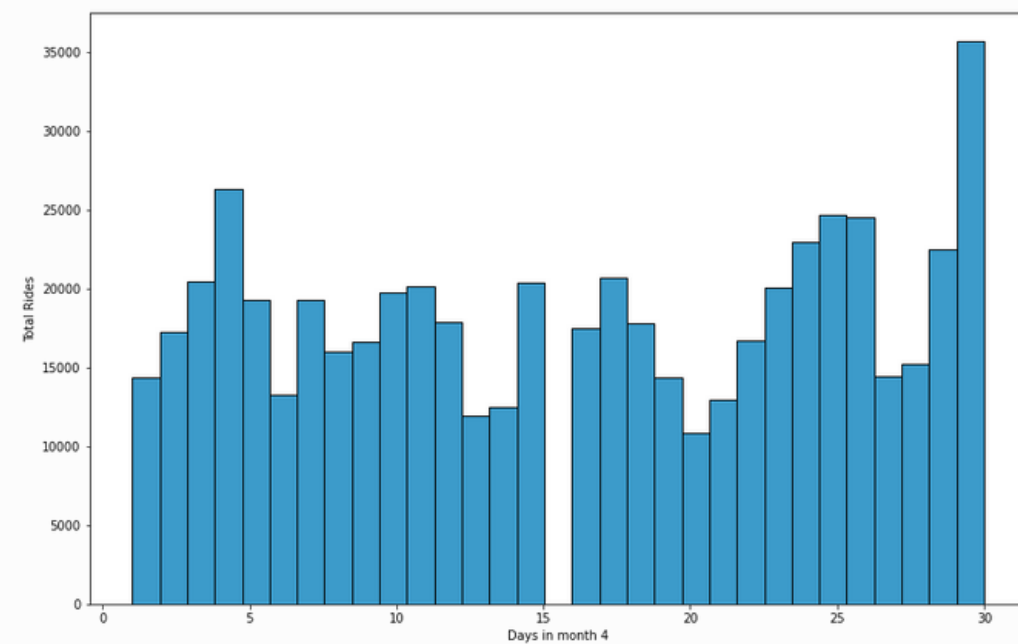
Name: month, dtype: int64



Total rides of each day in different month



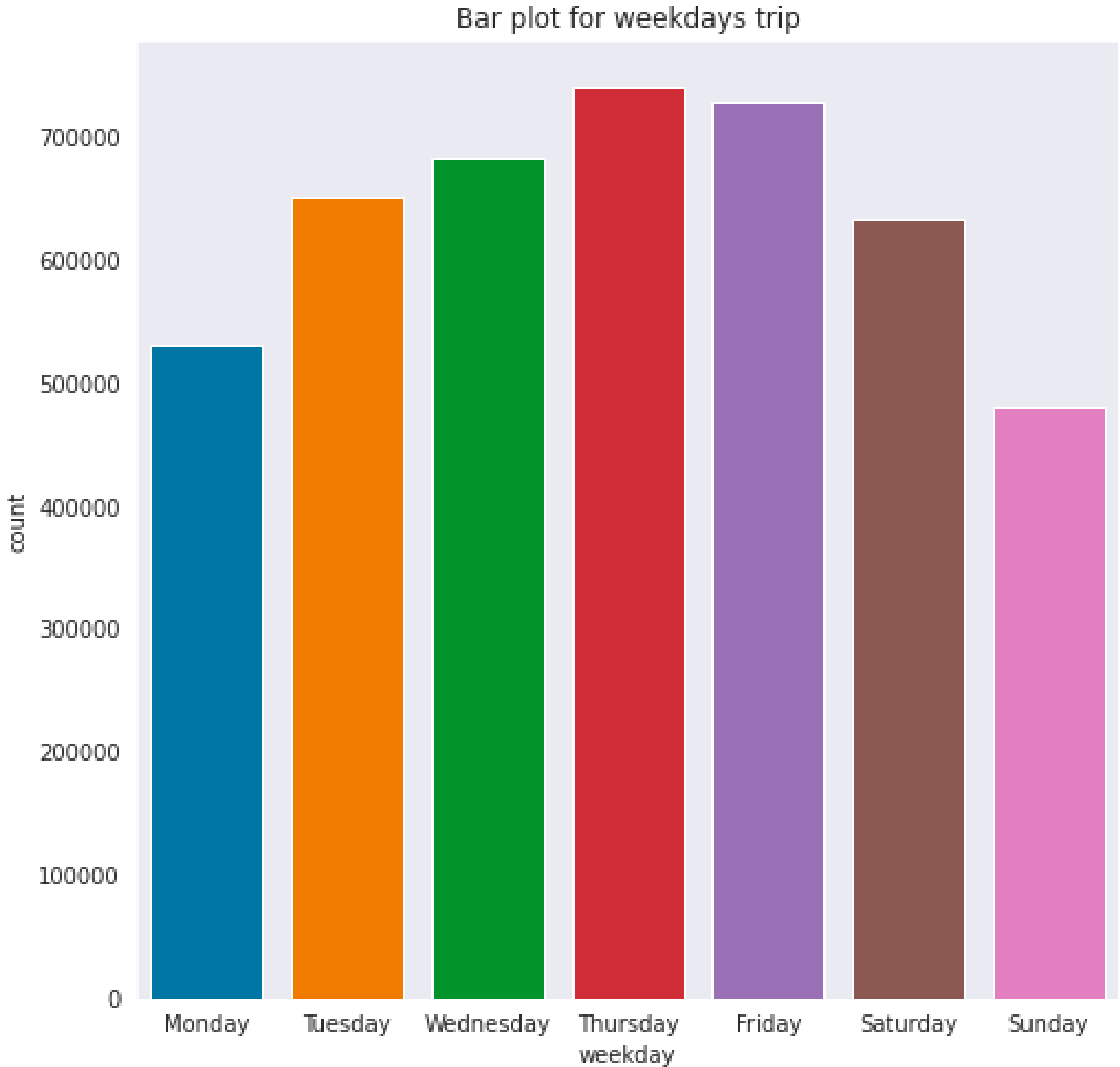
Four times per month



WEEKDAY ANALYSIS



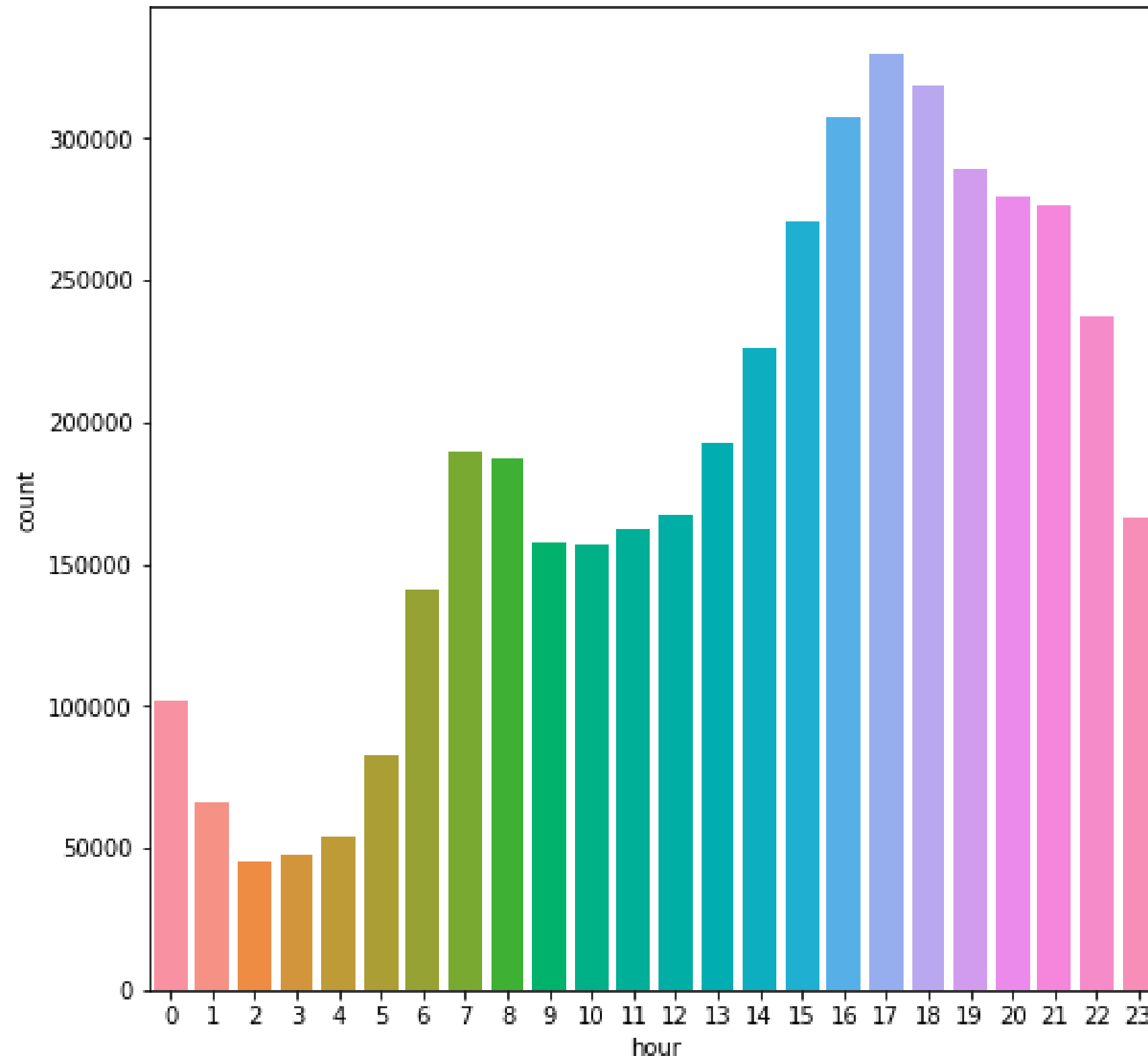
Thursday	741372
Friday	727532
Wednesday	683604
Tuesday	651753
Saturday	634194
Monday	532133
Sunday	481158
Name: weekday, dtype: int64	



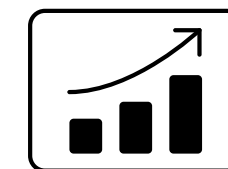


ANALYSIS BY DAYS

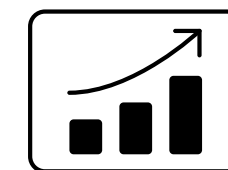
Bar plot for day trip



**Which is the busiest hour
in the day for uber cabs?**



7:00–8:00

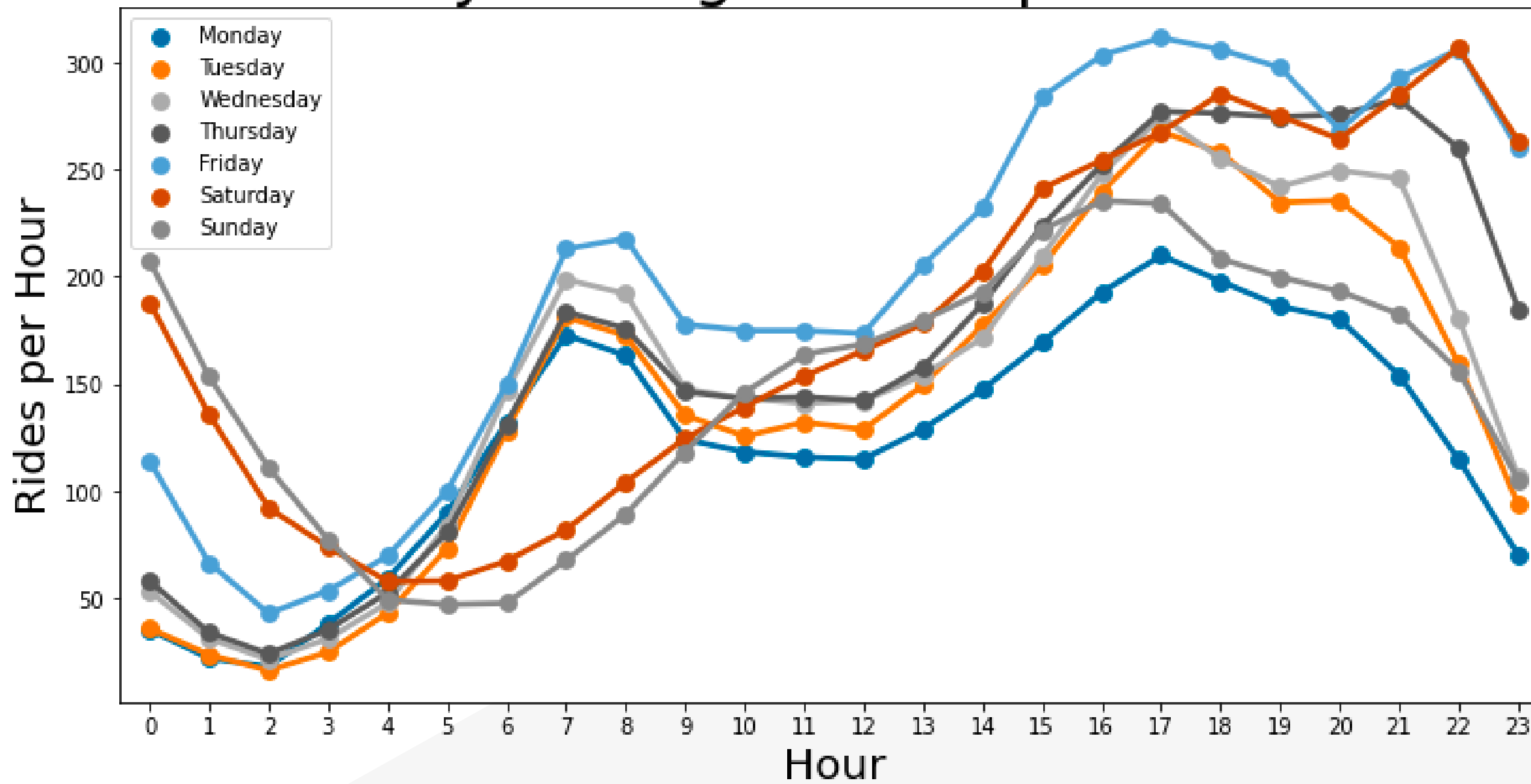


17:00–18:00

commuting time



Weekday Averages for September 2014

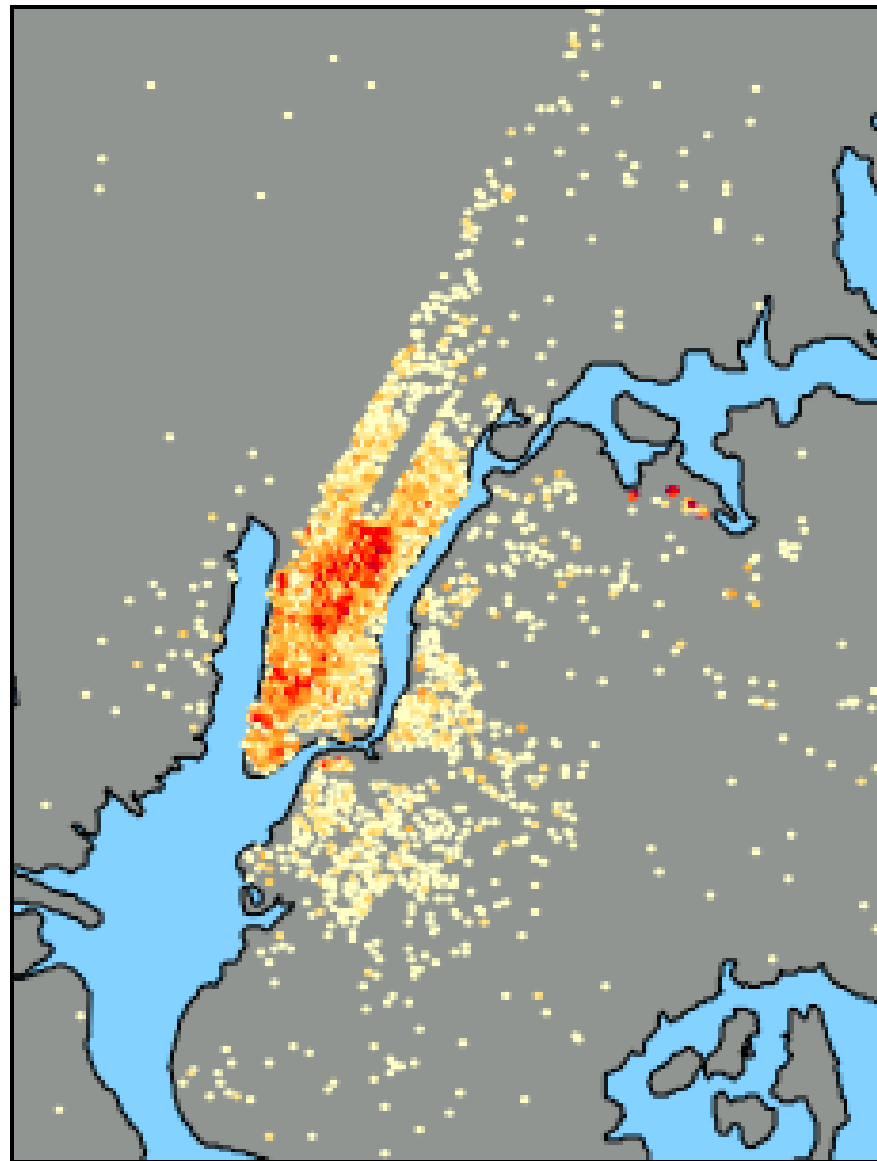


**workday vs
weekends**

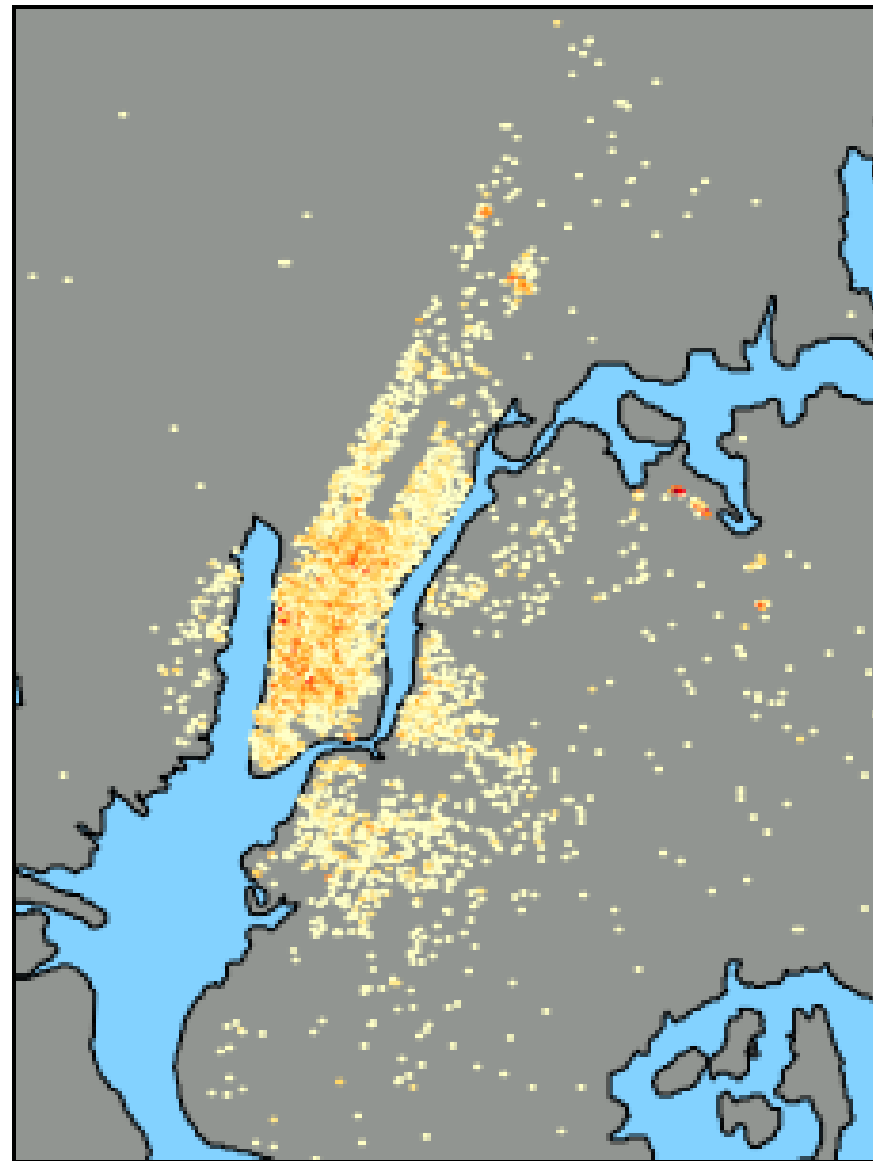
THURSDAY ANALYSIS

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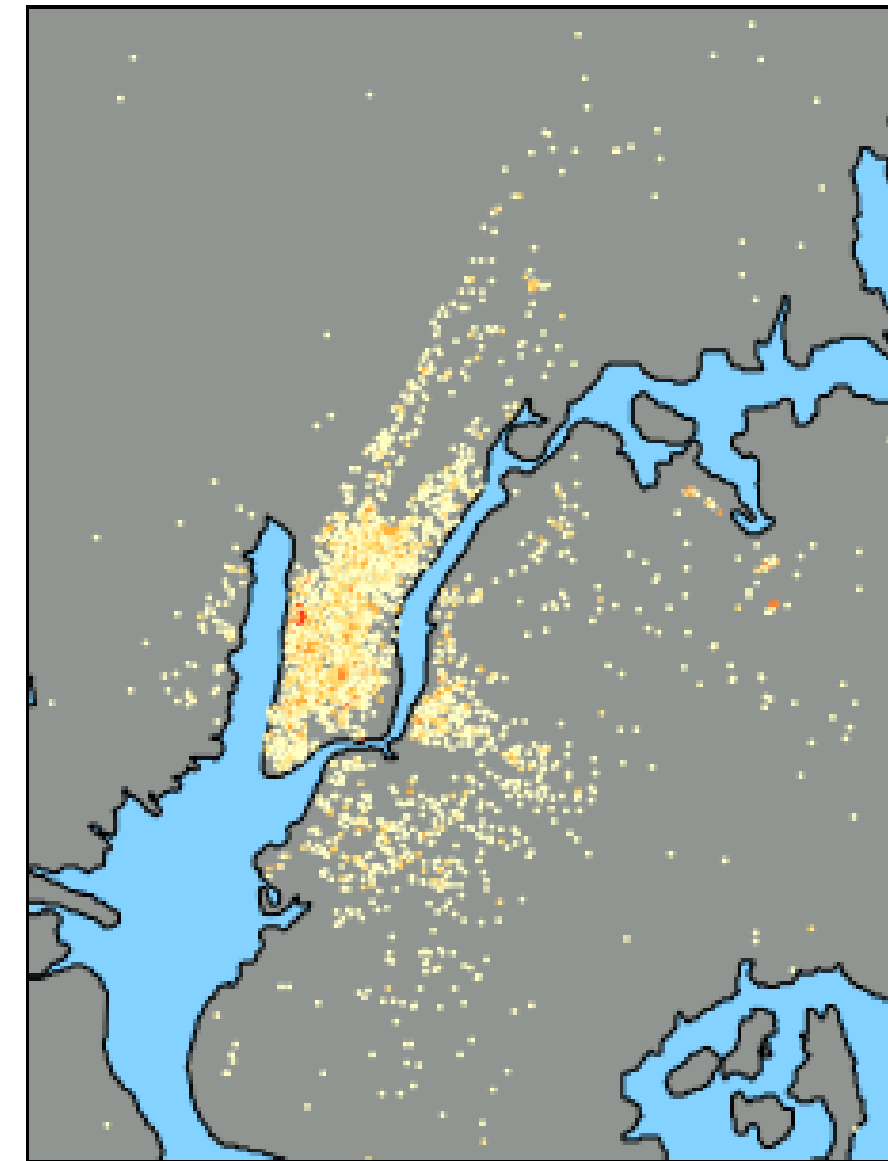
5 PM



9 PM



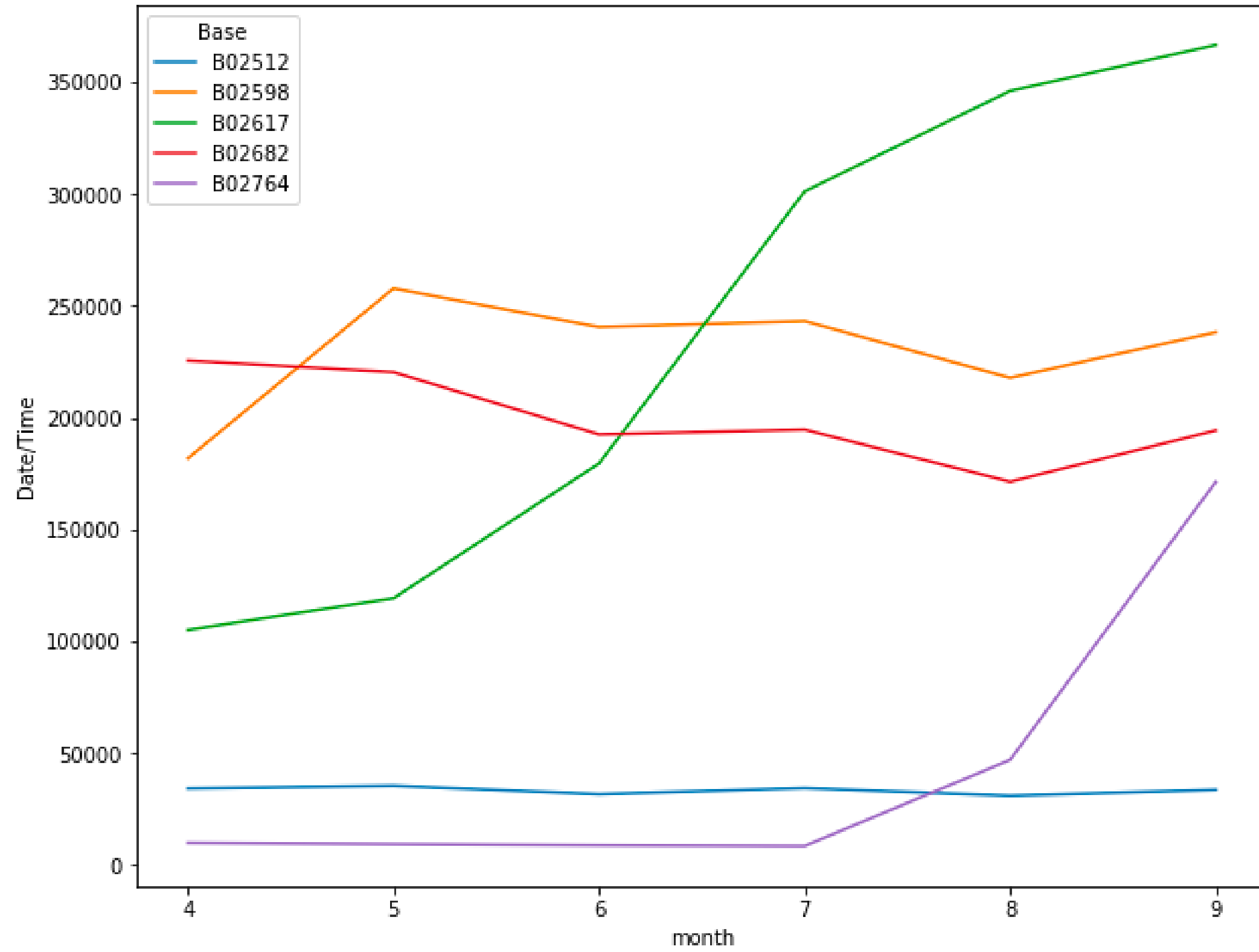
11 PM



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BASE ANALYSIS

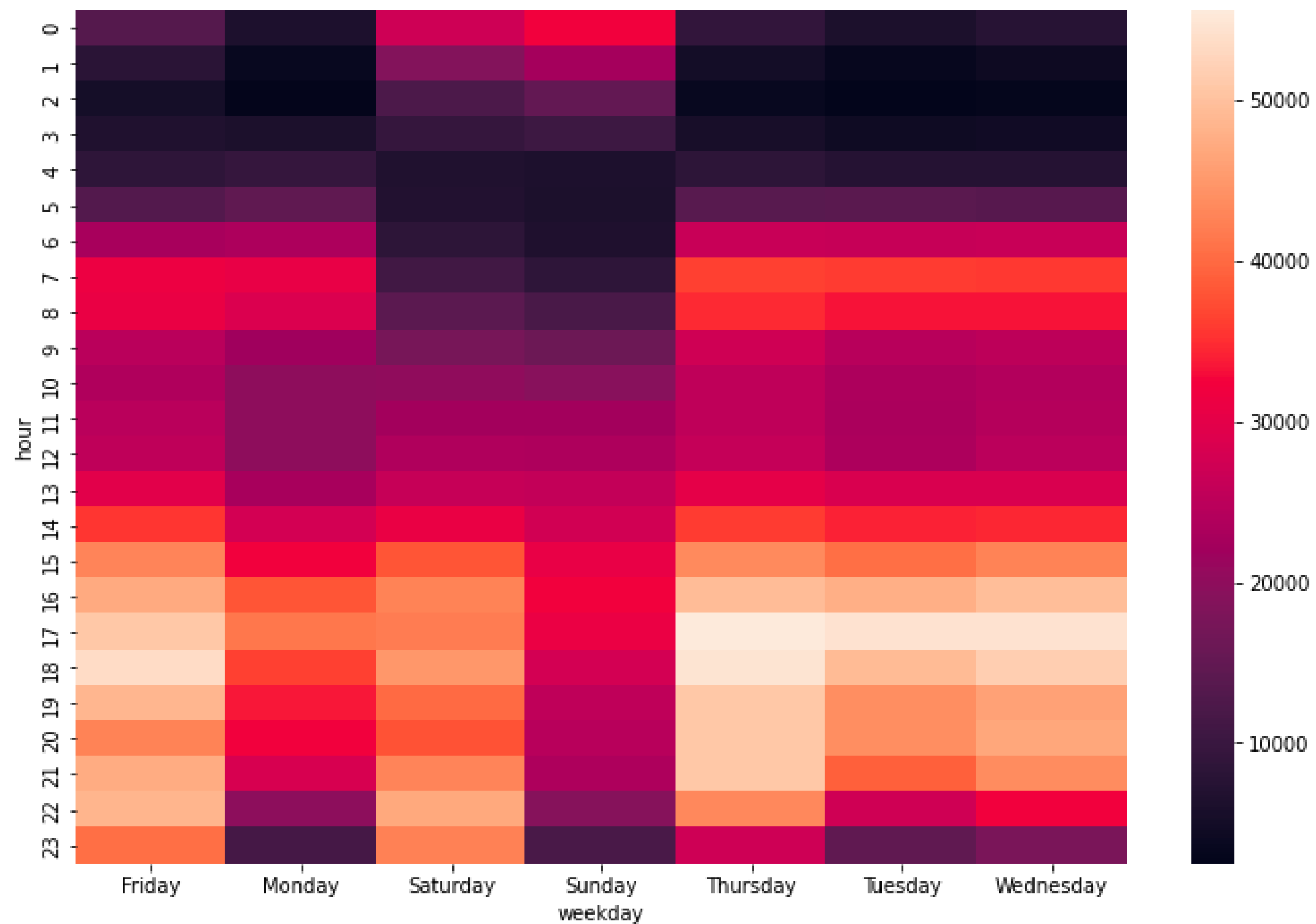


Area vs Month





CROSS ANALYSIS

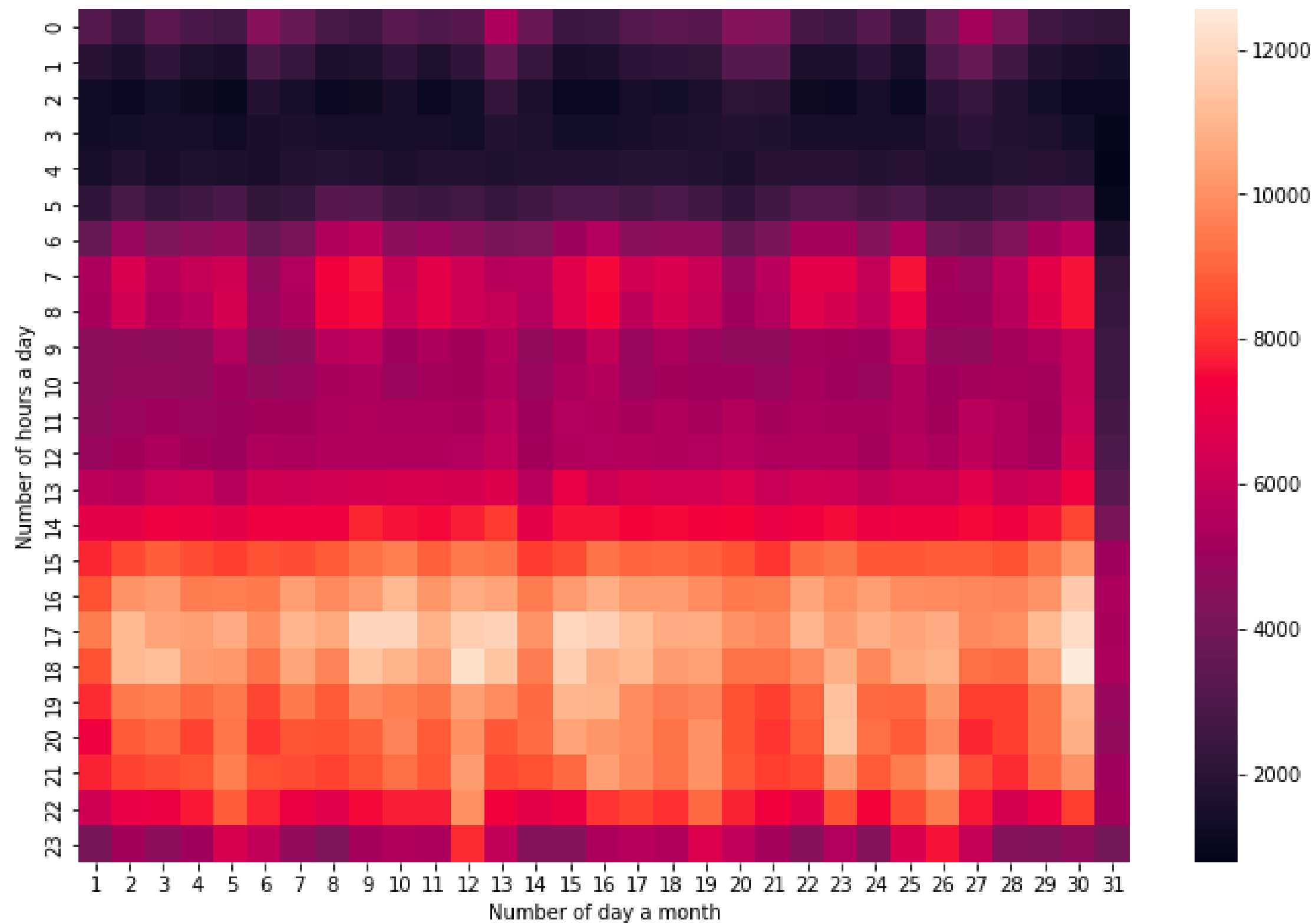


Hour vs weekday





CROSS ANALYSIS

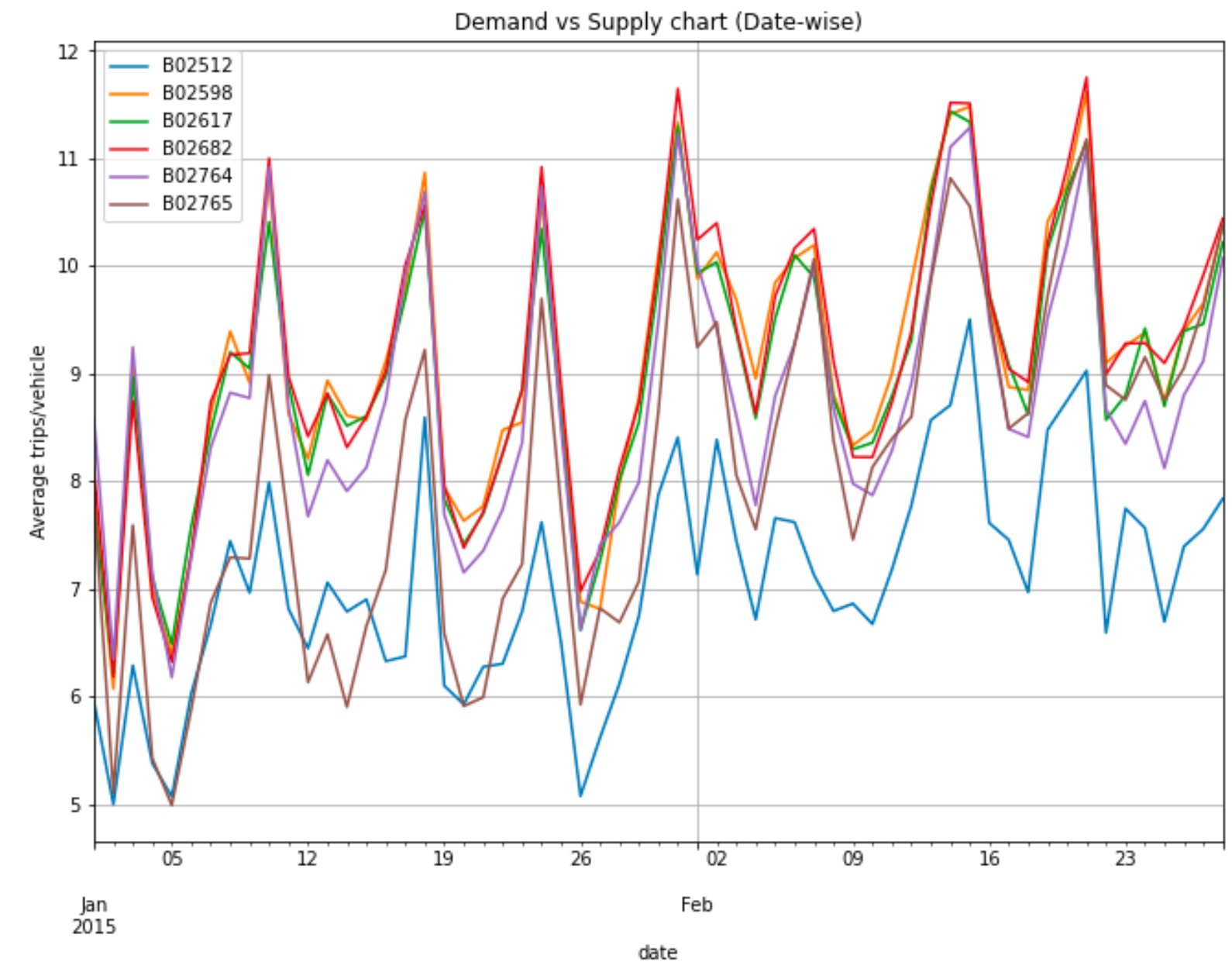
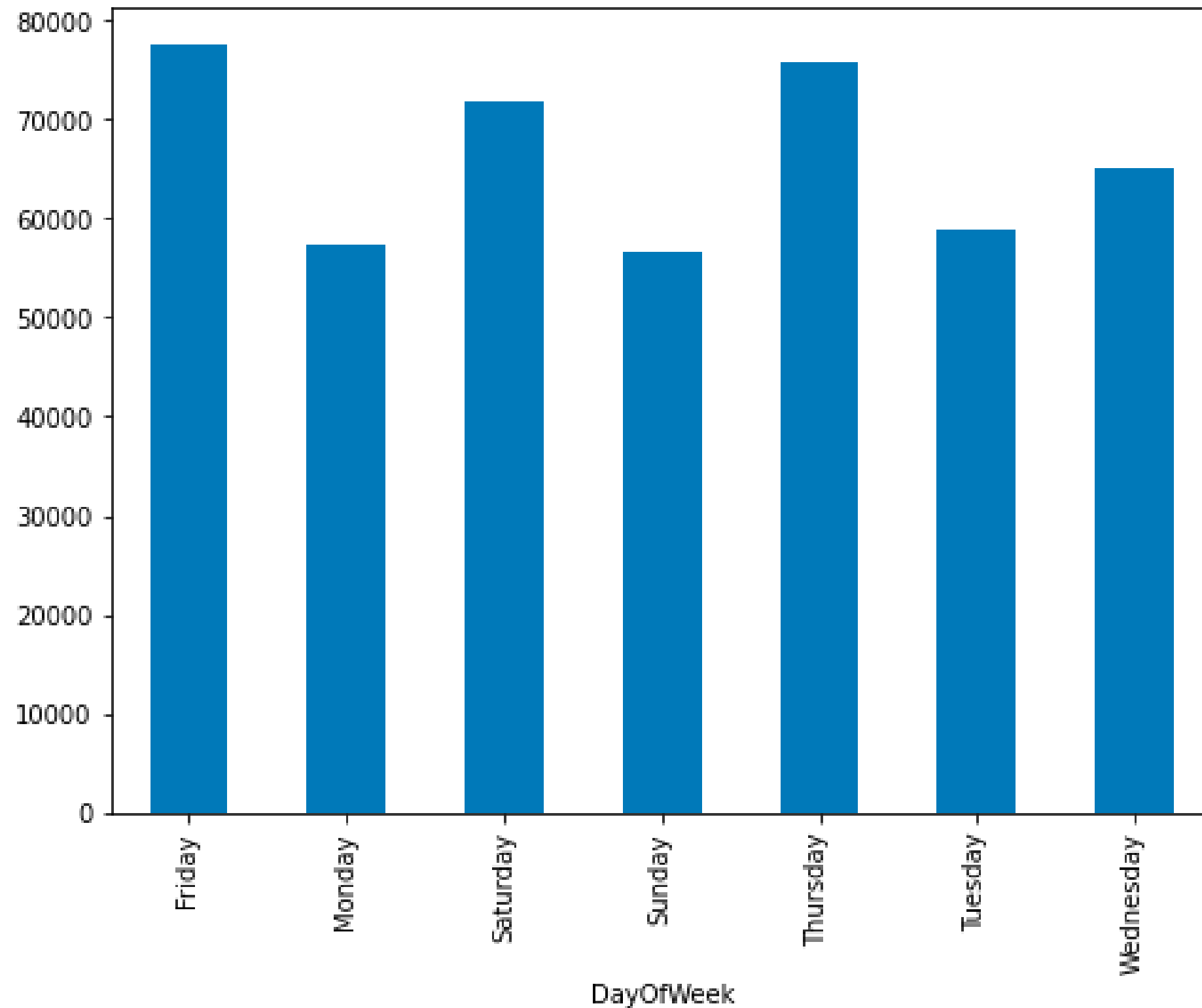


Hour vs days





DEMAND-SUPPLY ANALYSIS



RESULT



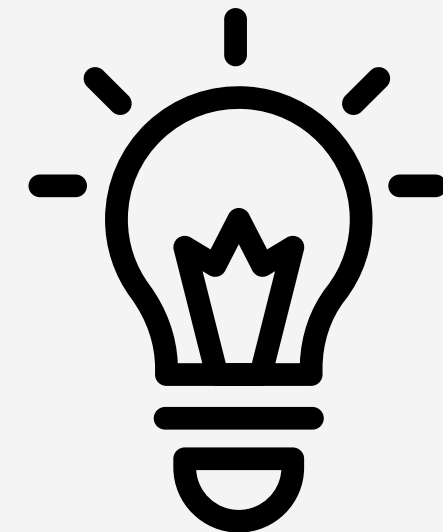
Weekday Analysis

Thursday & Friday



Time Analysis

17:00 - 18:00



Advice to driver

Only work on
Thursday & Friday
4pm - 7pm



THANK YOU

