All components of this case study have to be executed in Python
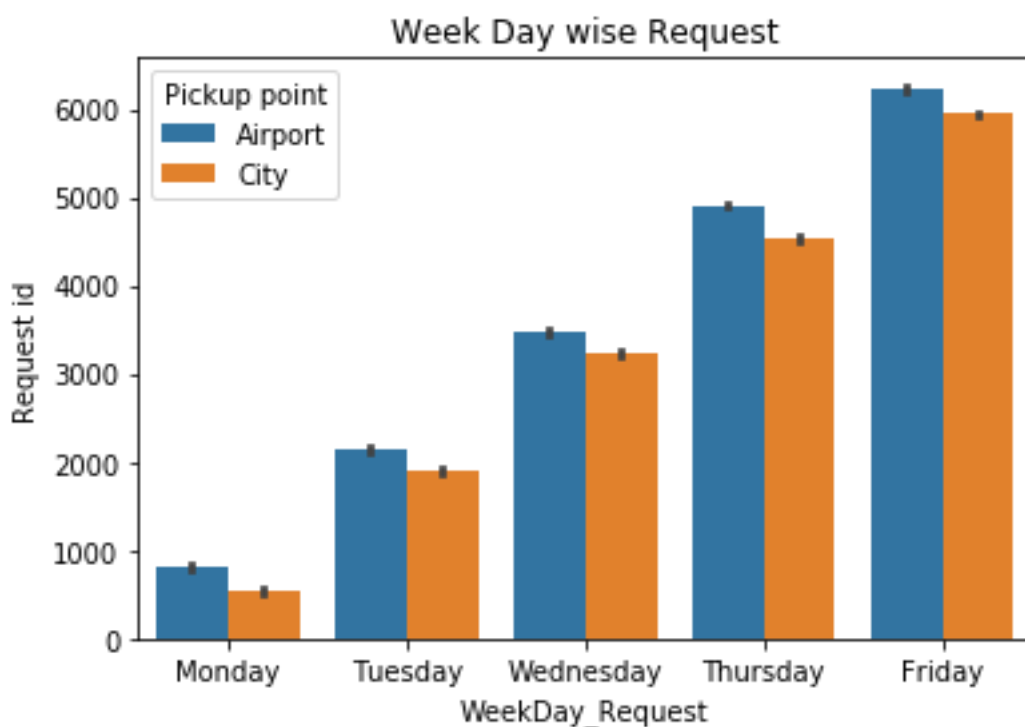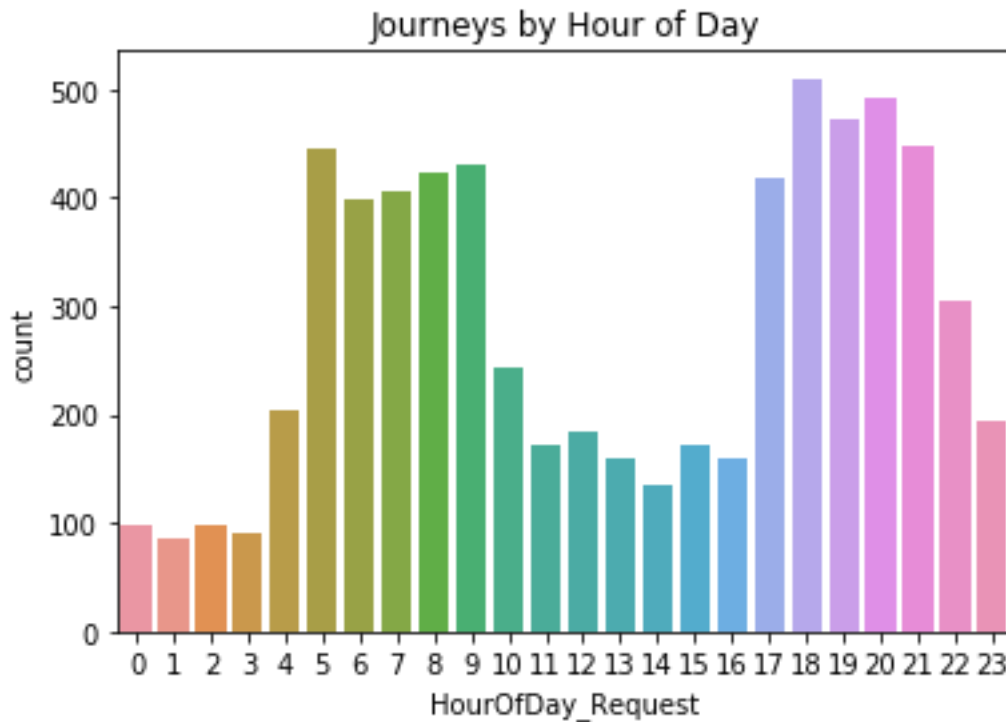
Data Cleaning:
I have imported the required libraries.
As the time was in String format I did convert it to Date and time format.I have derived columns Hours,Day and Demand and supply to solve the analysis.

Ploted a grouped bar chart depicting the hour-wise trip and Day wise request made at city and airport respectively. You can aggregate the data for all 5 days on the same axis of 24 hours. Each bar should correspond to an hour and pick-up point (city / airport) should be displayed in two colors.it same with week wise.

Per Day Request of Uber Cabs

Week Day wise Request

Journeys by Hour of Day

2   I have now divided the request-time into 5 time-slots described below.
    Make an additional column "Time_Slot" which takes these 5 categorical
    values depending on the request time:
    - EarlyMorning[SEP]
    - Morning[SEP]
    - Afternoon
    - Evening
   - Night[SEP]

PROBLEM IDENTIFICATION:

Make a bar chart where each bar represents a time slot and y axis shows the
frequency of requests. Different proportions of bars should represent the
completed, cancelled and no cars available out of the total customer requests

Request Hour of Day
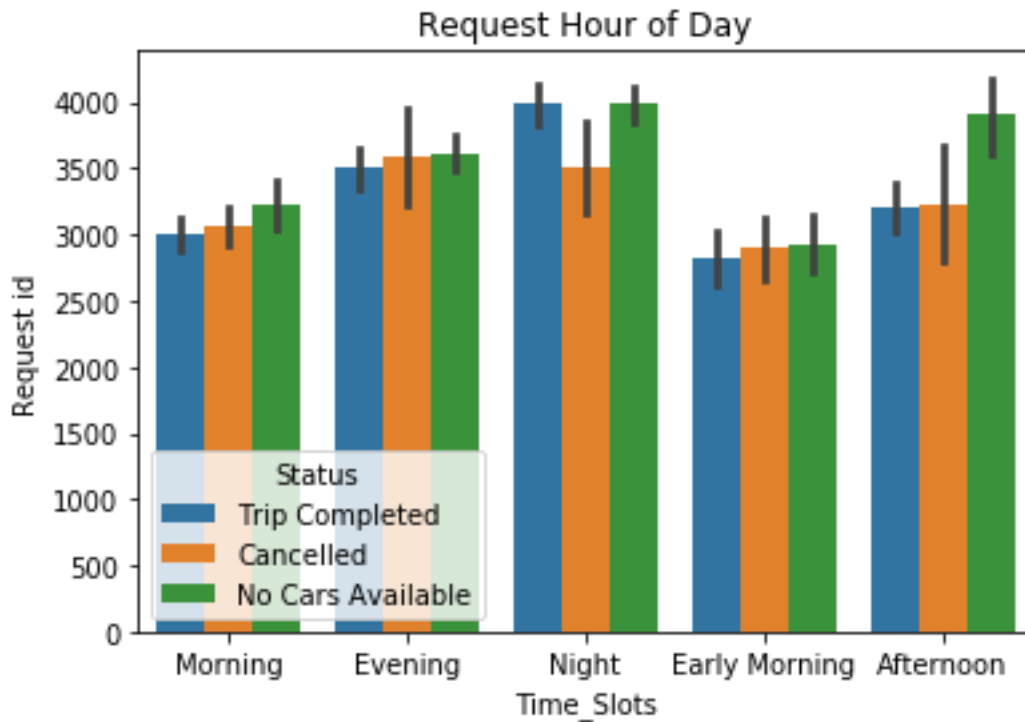
1. Now let's find out the gap between supply and demand. For this case, the demand is the number of trip requests made at the city, whereas the supply is the number of trips completed from city to the airport.⌈SEP⌉And GAP is No carsAvailable and Cancellations.

   No. of trip requests made in city: - 1693
   No. of trips completed from city to airport: - 476

Demand Vs Supply
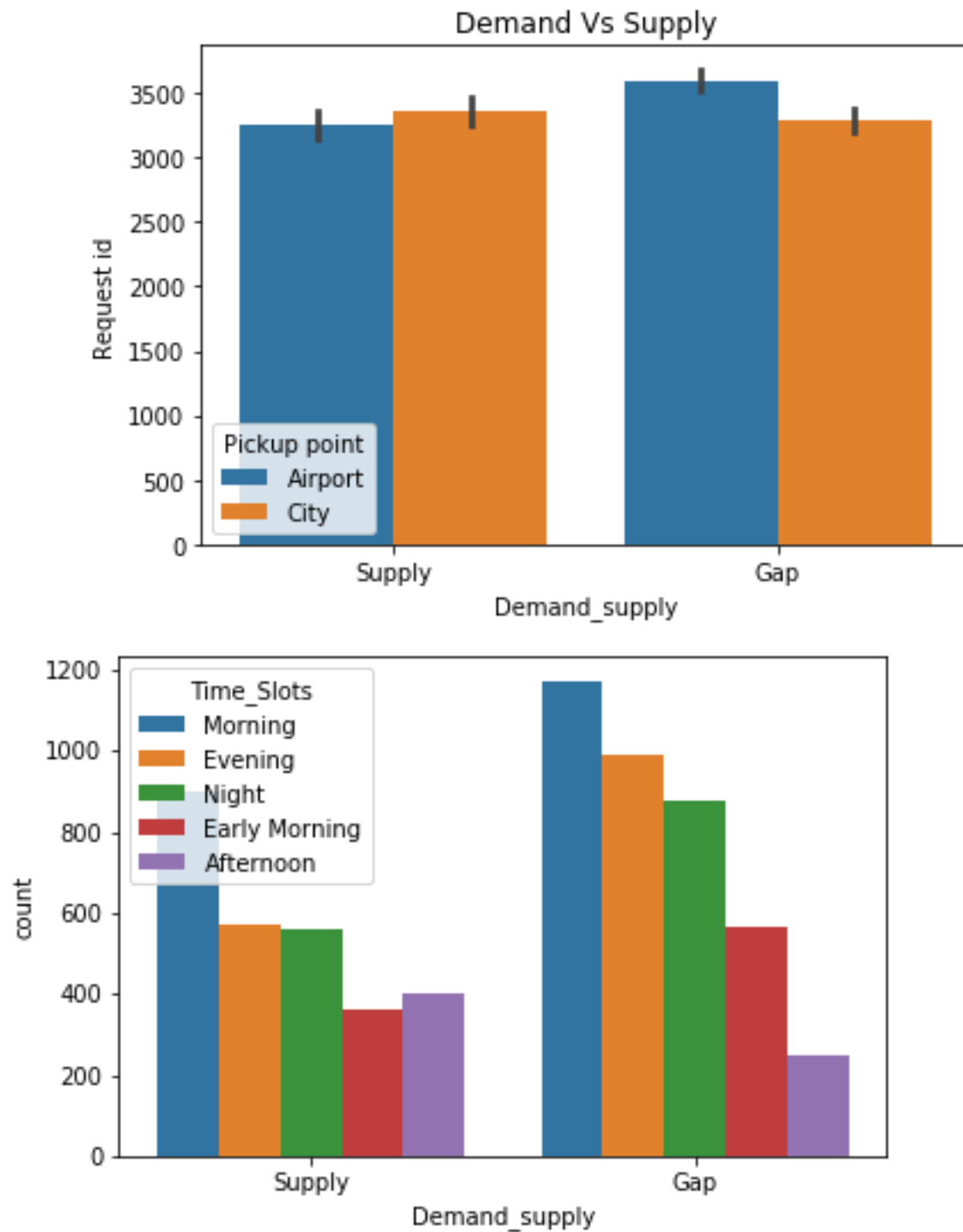
In City at Morning time slot there is a huge demand for cabs to airport, but this demand is not fulfilled since there is less cars in the City and the drivers which are there, most of them are not willing to go to airport.

: I would recommend to increase the number of cars in City at Morning hour and to give more weightage in incentives to the drivers if the trip is completed from city to airport on Morning hour