

# Capstone Project - 1

## EDA on Airbnb Booking Analysis

By

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# Problem Statement

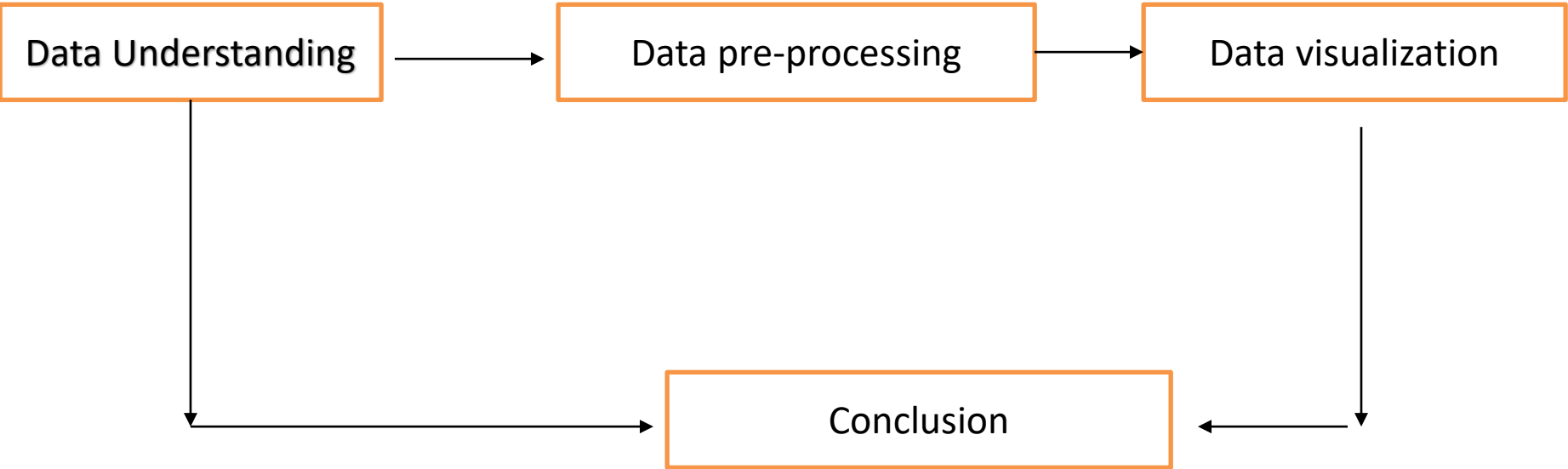
- ❑ One dataset is provided, with **information about Airbnb Bookings.**
- ❑ We must examine and evaluate the data in dataset in order to identify the important characteristics that influence Airbnb Bookings across the world.

## So, what factors influence Airbnb Bookings ?

An Airbnb booking Analysis Depends upon below mentioned factors:-

- ❑ Predictions like Location , Price, Reviews
- ❑ Different Hosts and Areas they choose
- ❑ Busiest Hosts
- ❑ Traffic among different areas.





# Data Summary

## Airbnb Booking Data

- |  |  |
|--|--|
| <input type="checkbox"/> ID                  | <input type="checkbox"/> Longitude                     |
| <input type="checkbox"/> Name                | <input type="checkbox"/> Room type                     |
| <input type="checkbox"/> Host ID             | <input type="checkbox"/> Price                         |
| <input type="checkbox"/> Host Name           | <input type="checkbox"/> Minimum Nights                |
| <input type="checkbox"/> Neighbourhood Group | <input type="checkbox"/> Calculated host listing count |
| <input type="checkbox"/> Neighbourhood       | <input type="checkbox"/> Availability around year      |
| <input type="checkbox"/> Latitude            |  |

## User\_reviews

- ☐ Number of reviews
- ☐ Last review
- ☐ Reviews per month



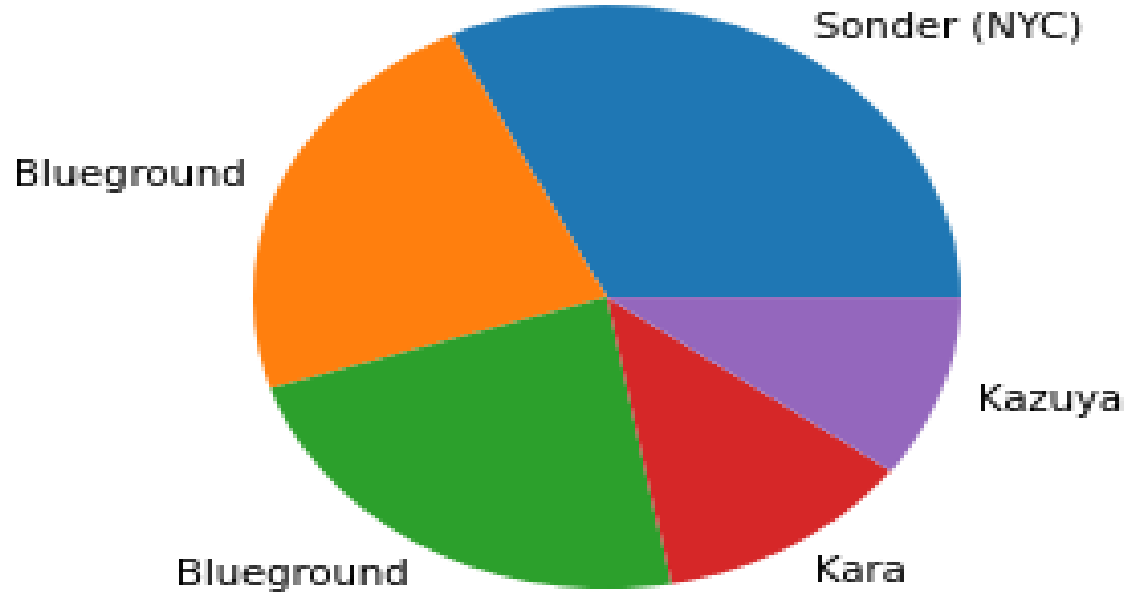
# Agenda

- ☐ Room Type Rating Analysis
- ☐ Categorical Analysis
- ☐ Airbnb Rating Analysis
- ☐ Busiest host and areas
- ☐ Average stay at a particular area
- ☐ Most Popular Areas
- ☐ Data realisation
- ☐ Reviews Analysis
- ☐ Challenges Faced
- ☐ Analysis Summary



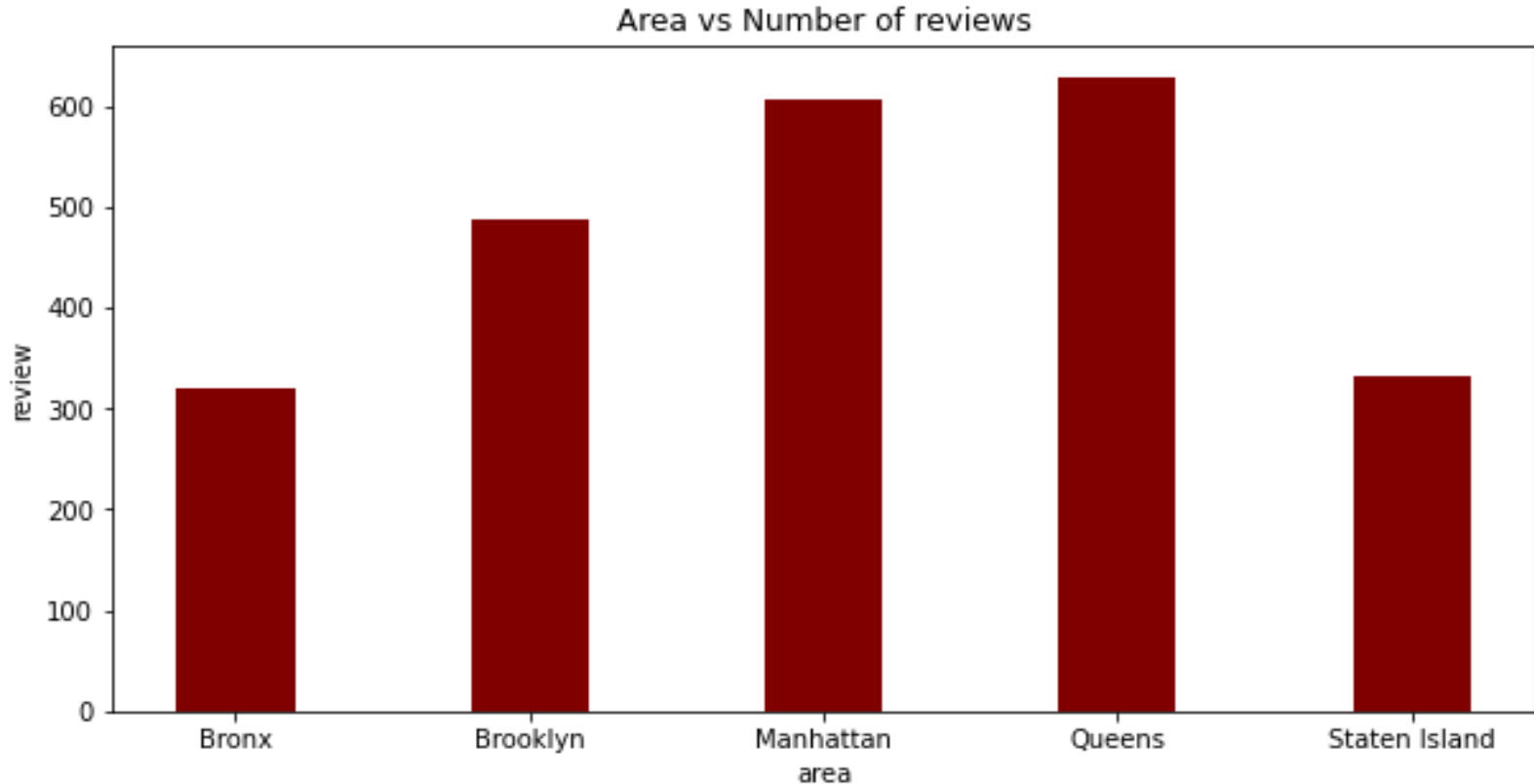
# Hosts Vs Area

☐ Most number of listings



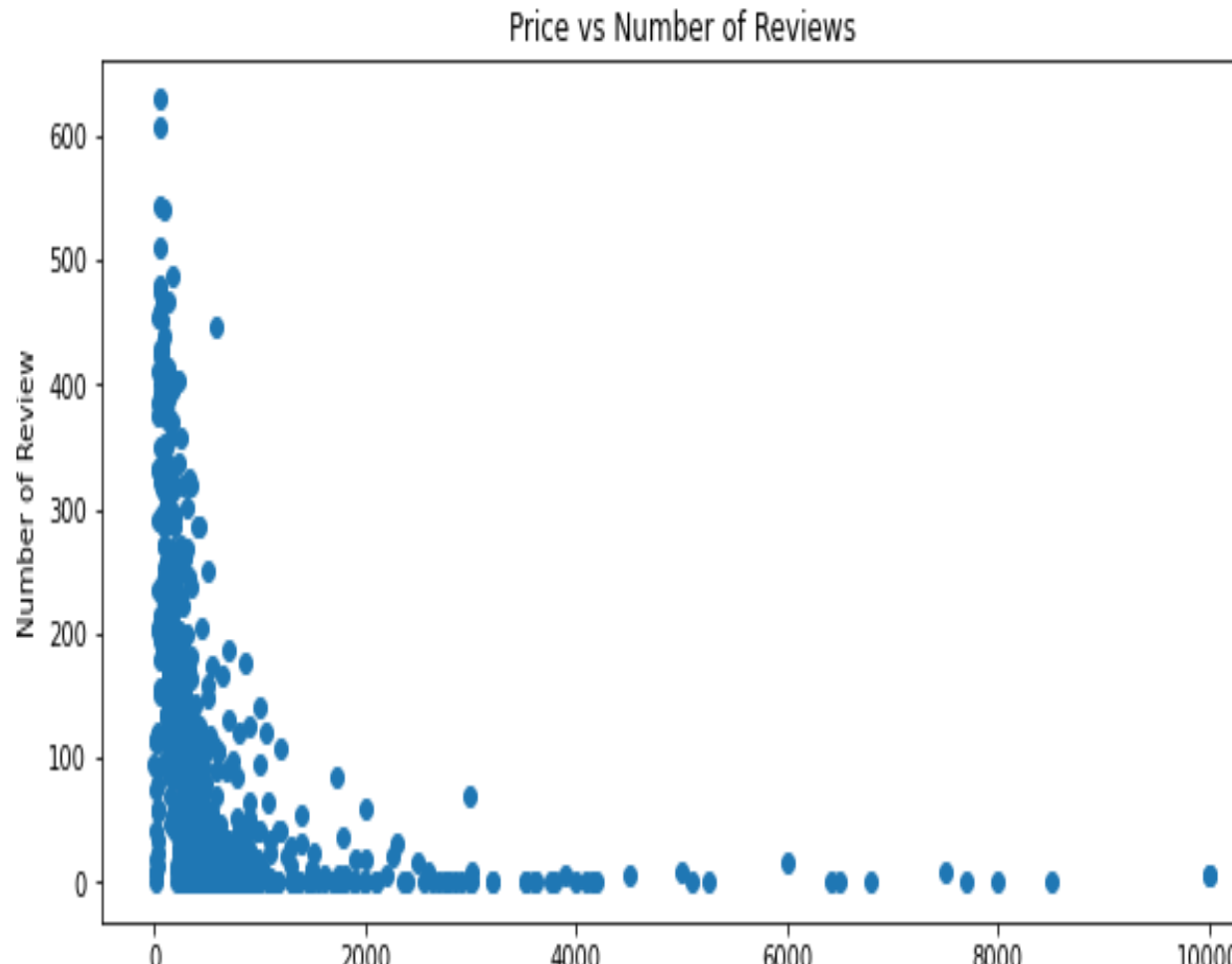
# Categorical Analysis

□ Area Vs number of reviews



# Categorical Analysis (Contd.)

- ❑ From the analysis, we can say most people prefer to stay in place where price is less.
- ❑ We can conclude from the graph that hotels with low prices have the highest number of reviews.

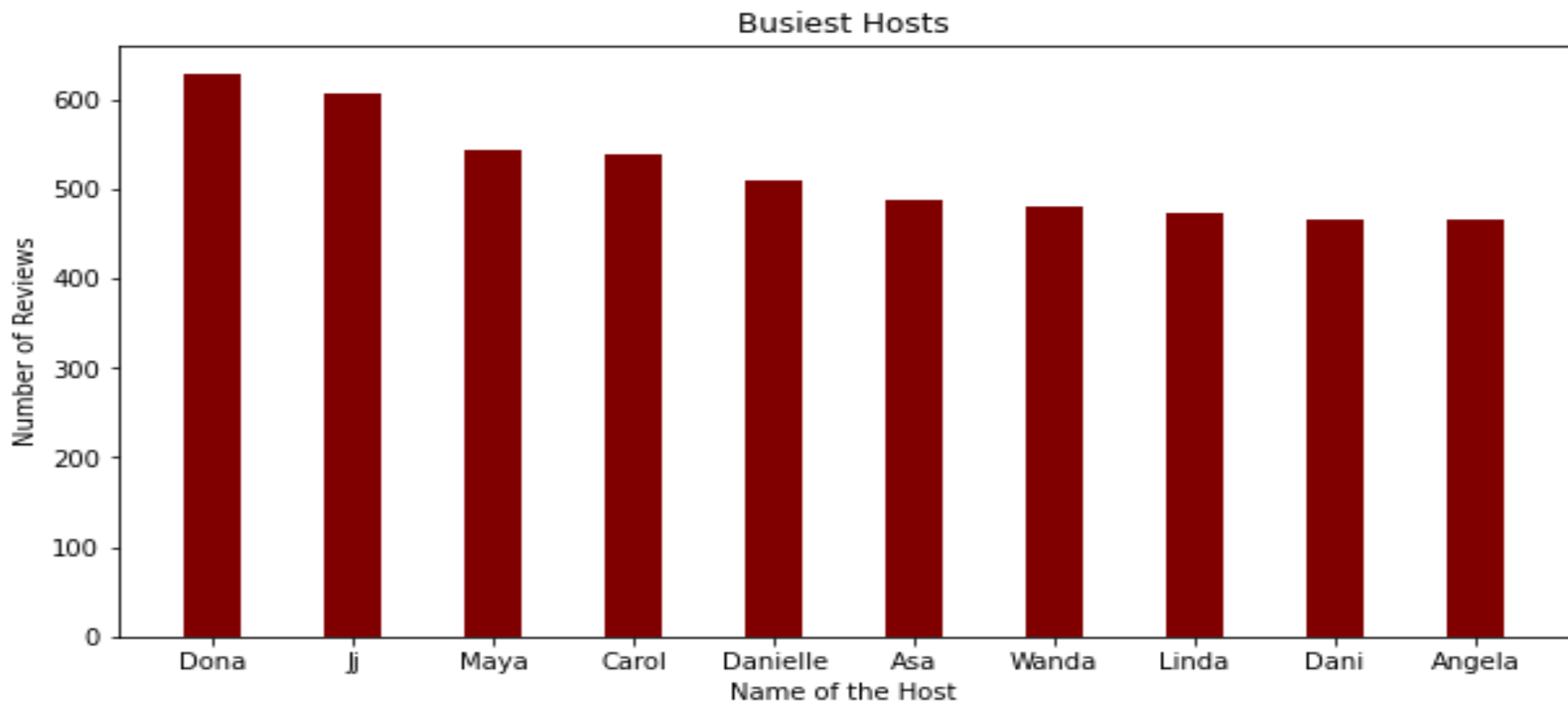




# Top busiest Hosts

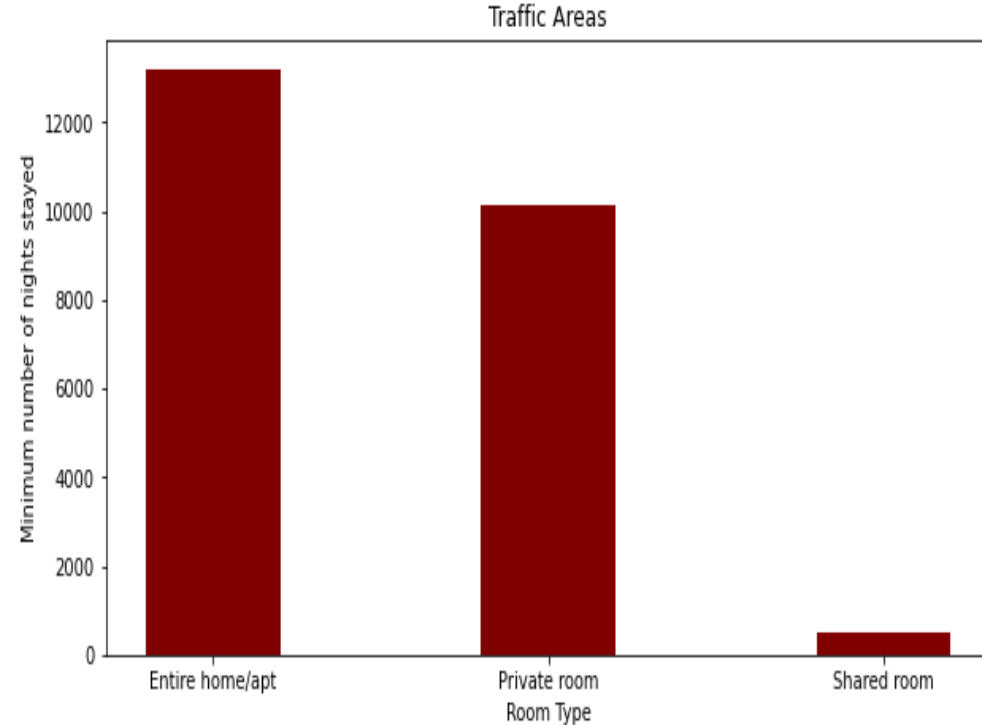
- ❑ There are a total of 10 Hosts.
- ❑ Hosts listed room type as Entire home and Private room which is preferred by most number of people.
- ❑ From the data we can conclude that top 5 hosts are :-
  - ❑ 1. Dona
  - ❑ 2. Ji
  - ❑ 3. Maya
  - ❑ 4. Carol
  - ❑ 5. Danielle

# Top Busiest Hosts Continued:-



# Difference of traffic among different areas

- ❑ We can conclude from above graph that are preferring Entire home/apt
- ❑ People are less lean towards shared room.
- ❑ We can Say that People are preferring Entire home/apt or Private room which are present in Manhattan, Brooklyn, Queens.
- ❑ People are preferring listings which are less in price.



# Data Visualization through Tableau and Ms- Excel

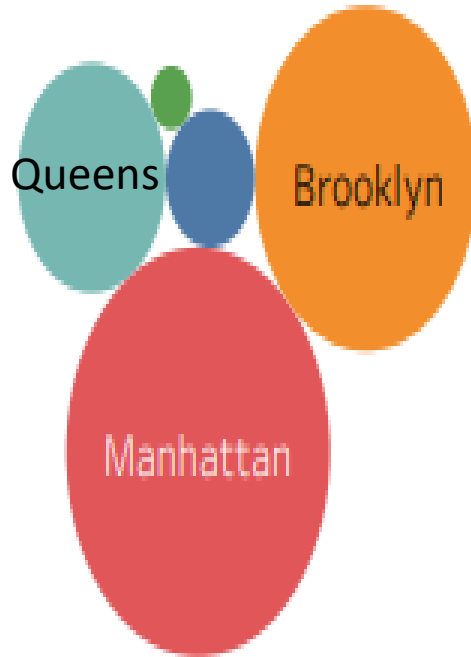
- ❑ With the help of Tableau and MS-Excel we will infer the data about different host and areas related to them.
- ❑ With these tools we will answers these question :-
- ❑ Different host listings in neighbourhood groups.
- ❑ Number of reviews given to a particular room type.
- ❑ Category of room and it's price with respect to different neighbourhood.
- ❑ Maximum how many nights does a host stayed in a particular room type.

## Hosts listings in different neighbourhood groups :-

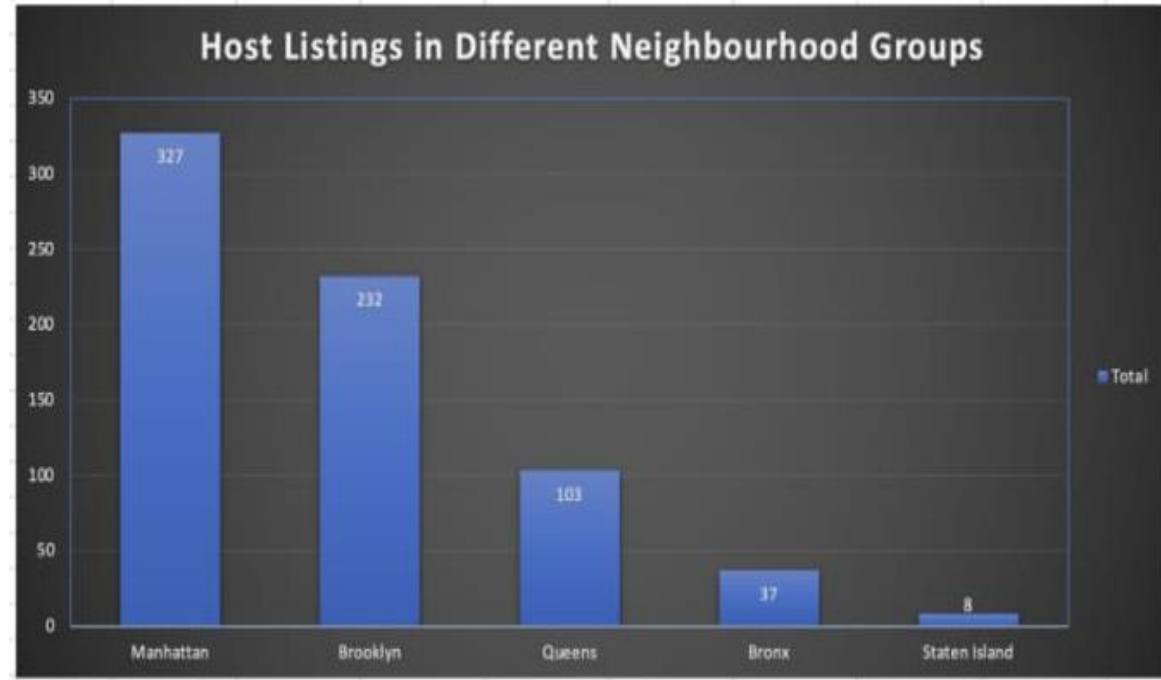
❑ Blue colour indicates **Staten Island**

❑ Green colour indicates **Bronx**

Through Tableau

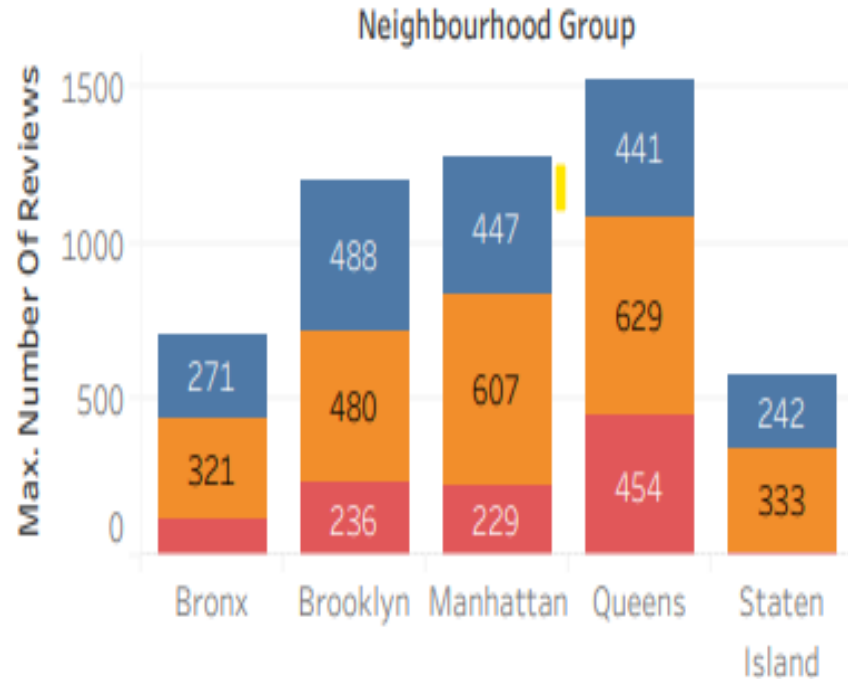


Through Excel



# Number of reviews with respect to room type

Through tableau



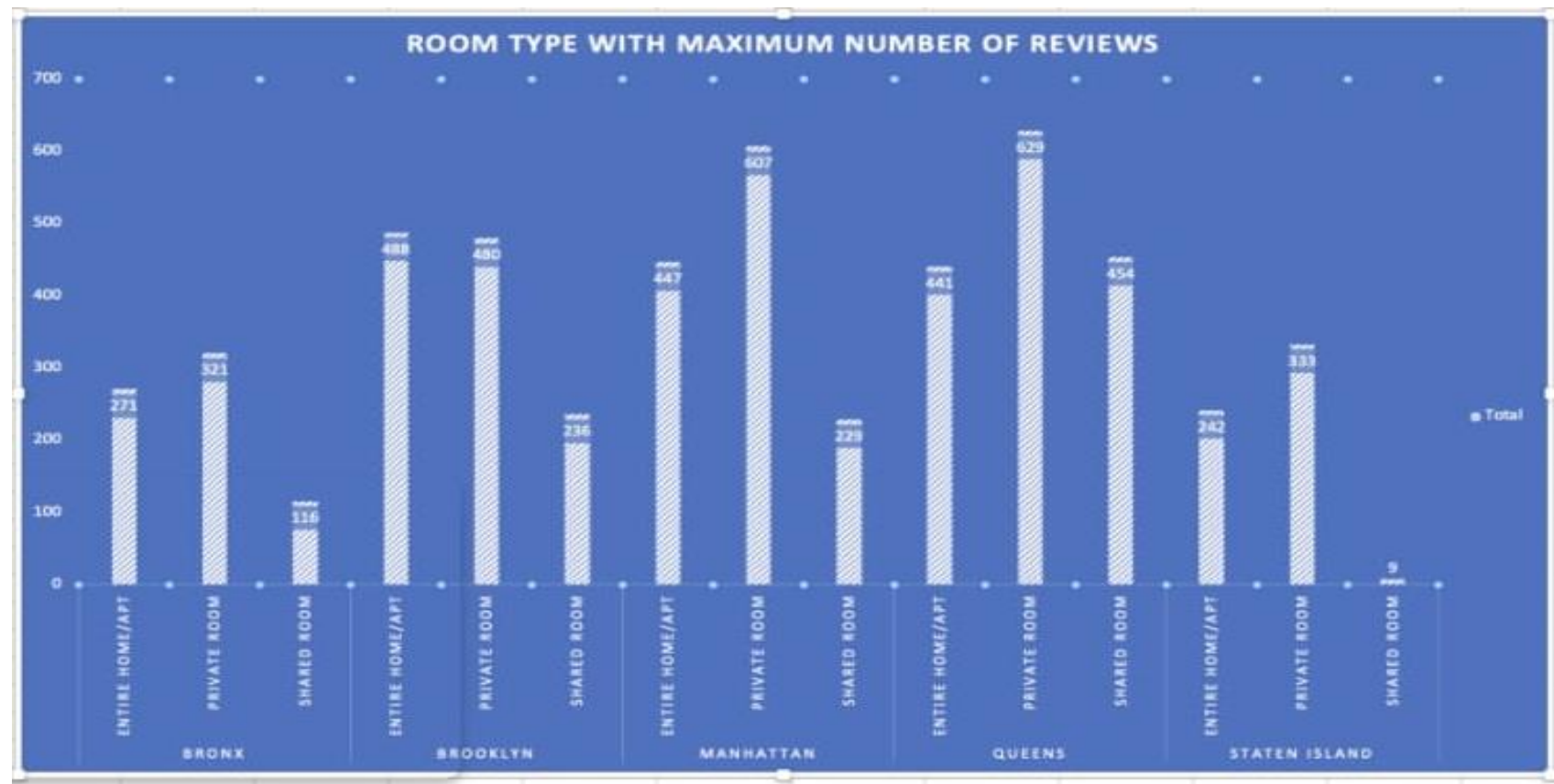
Through tableau

Saffron colour Show **Private Room**

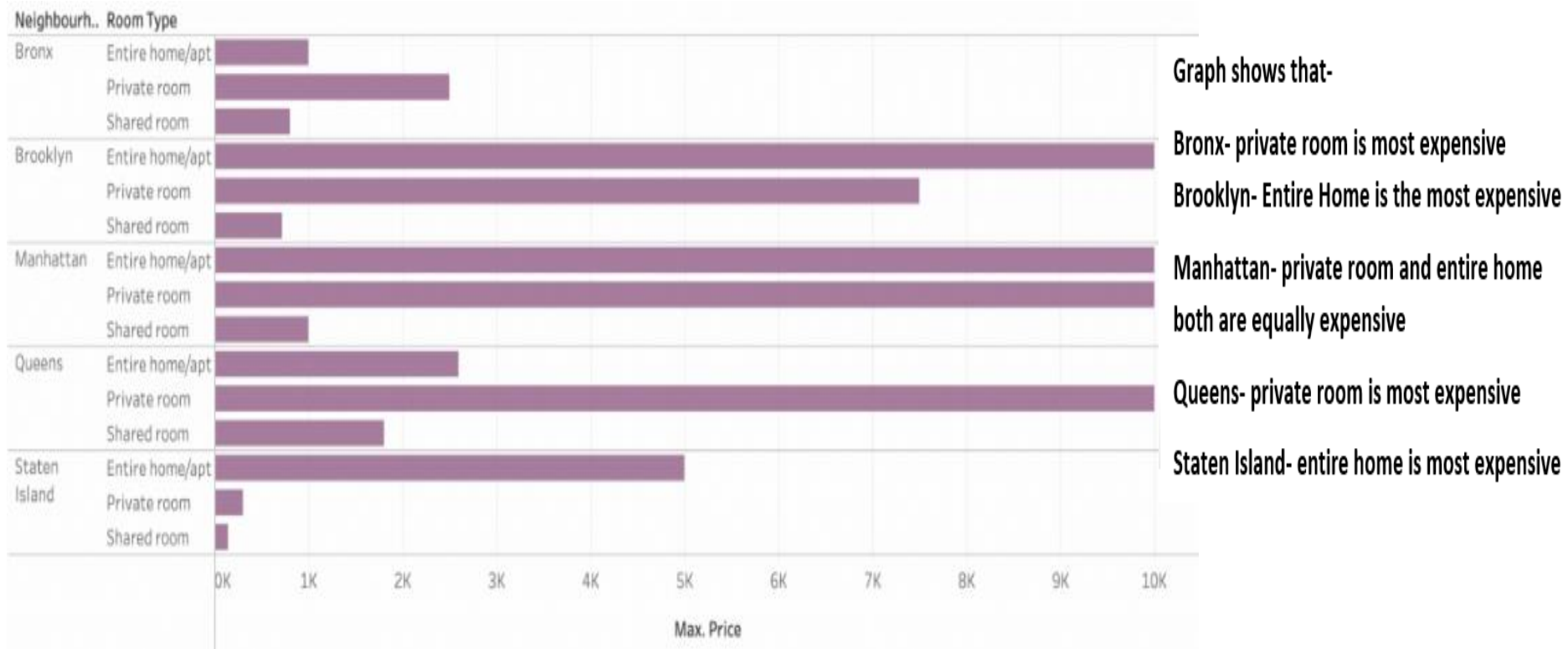
Blue colour shows **Entire home/Apt**

Pink colour Shows **Shared Rooms**

# Data through Excel



# Room type with respect to price in different neighbourhood

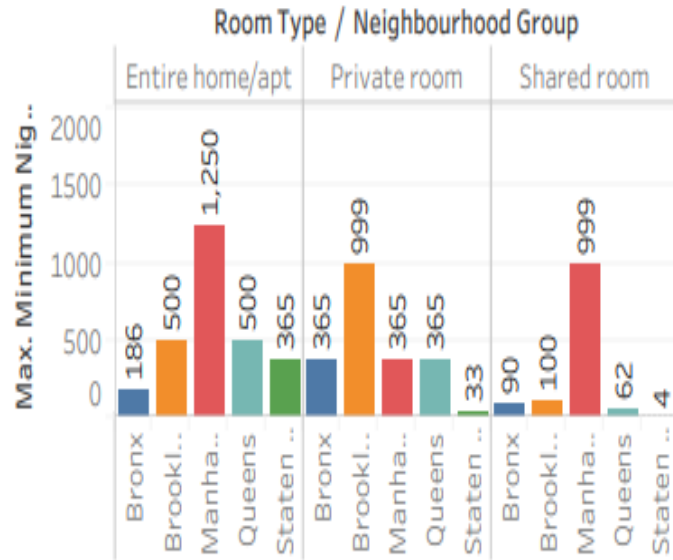




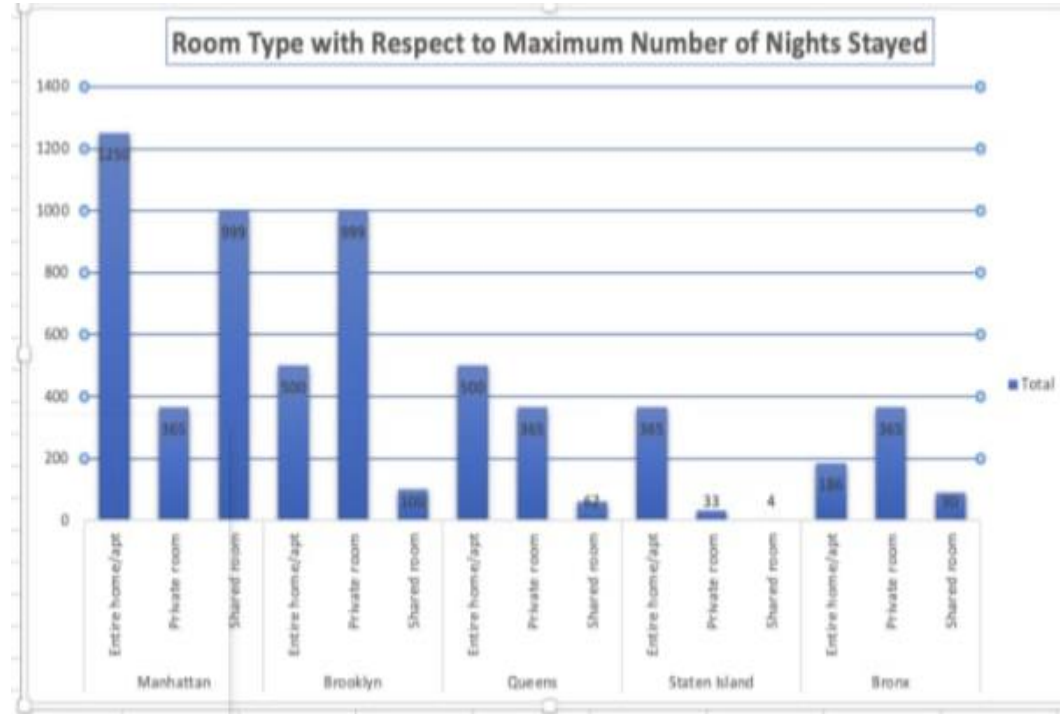
# Maximum number of nights stayed in which room type



Through Tableau



Through MS Excel



# Room type with respect to maximum Price



# Analysis Summary

- ☐ The people who prefer to stay in Entire home or Apartment they are going to stay bit longer in that particular Neighborhood only.
- ☐ The people who prefer to stay in Private room they won't stay longer as compared to Home or Apartment.
- ☐ Most people prefer to pay less price.
- ☐ If there are more number of Reviews for particular Neighborhood group that means that place is a tourist place.
- ☐ If people are not staying more then one night means they are travelers.

# Thank You

