Why Airbnb?

Airbnb is a leading website where people secan book beds, rooms, apartments, homes etc. all around the world. It provides a platform for the people to rent out their places at their convenience without involving complex channels or doing major investments. Users can also find a place to stay at competitive prices as compared to hotels. Through Airbnb, people can find a place to stay even in the areas where the likelihood of having hotels is very less. Many times, even people prefer to stay in local settings, with local people.

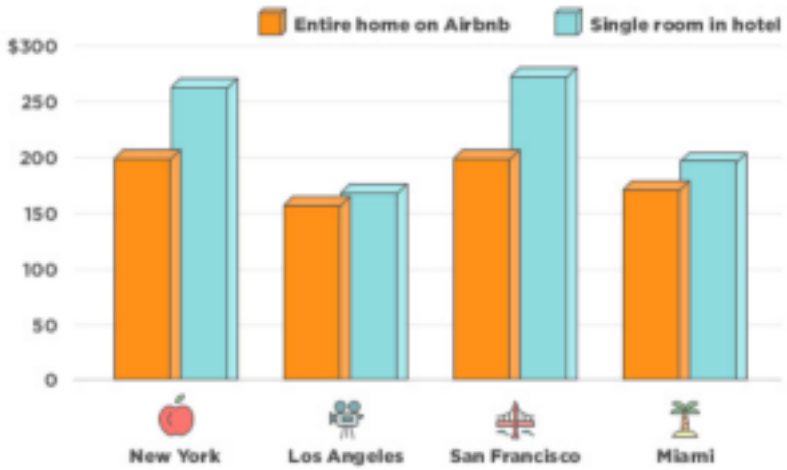


Fig. Average rates for an entire home on Airbnb is the same or lower for the cost of a single hotel room.

Airbnb Statistics

- Over 4 million listings worldwide
- 150 million users
- In over 191 countries
- Worldwide value is $32 billion
- Global growth rate since 2009 - 153%
- Estimated revenue by 2020 - $8.5 billion

Data Cleaning

Initially, Data was very messy and unclean, so we used eThese statistics clearly show that Airbnb is a leader in the business and drew our attention to study in depth and visualise its various parameters and functioning.

Visualisation Tool

Tableau has been used as the Data Visualization tool as it is a very powerful, secure and flexible end to end analytics platform where we can visualise our data quickly and easily by

creating interactive dashboards and convey an overall story using storyboard. Tableau has been used predominantly in the industry for creating powerful visualisation.

Airbnb NYC 2019 Analysis EDA using Python.

Project Summary -

Airbnb, Inc. is an American company that operates an online marketplace for lodging, primarily homestays for vacation rentals, and tourism activities.Based in San Francisco, California, the platform is accessible via website and mobile app.
Since 2008, guests and hosts have used Airbnb to expand on travelling possibilities and present a more unique,personalised way of experiencing the world.
This data set has around 49,000 observations in it with 16 columns and it is a mix between categorical and numeric values.This dataset contains listings information such as listing name,hostname,room types, minimum night stays,availability,area,reviews etc.
In this session we explore and analyse the data to discover the key understanding.we use EDA for this data.

Problem statement:

•What can we learn about different hosts and areas?
•What can we learn from predictions? (ex: locations, prices, reviews, etc)
•Which hosts are the busiest and why?
•Is there any noticeable difference of traffic among different areas and what could be the reason for it?

Chart - 1

Chart - 1 visualisation code
df['room_type'].value_counts().plot(kind='bar', color='green',figsize=(12,7))

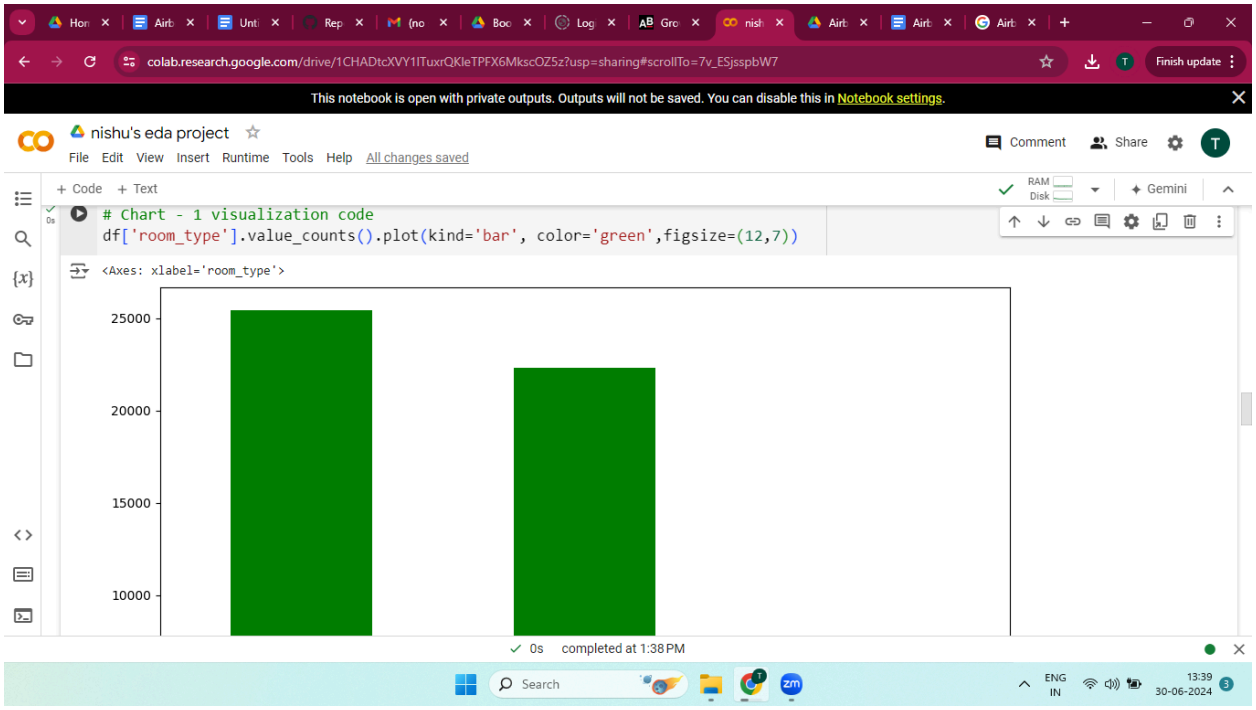


Chart - 2

```
# Chart - 2 visualization code
top_10_hosts=df['host_name'].value_counts()[:10]
top_10_hosts

top_10_hosts.plot(kind='bar',color='r',figsize=(12,7))
plt.xlabel('top_10_host')
plt.ylabel('total_NYC_listings')
plt.title('top hosts ')
plt.show()
```

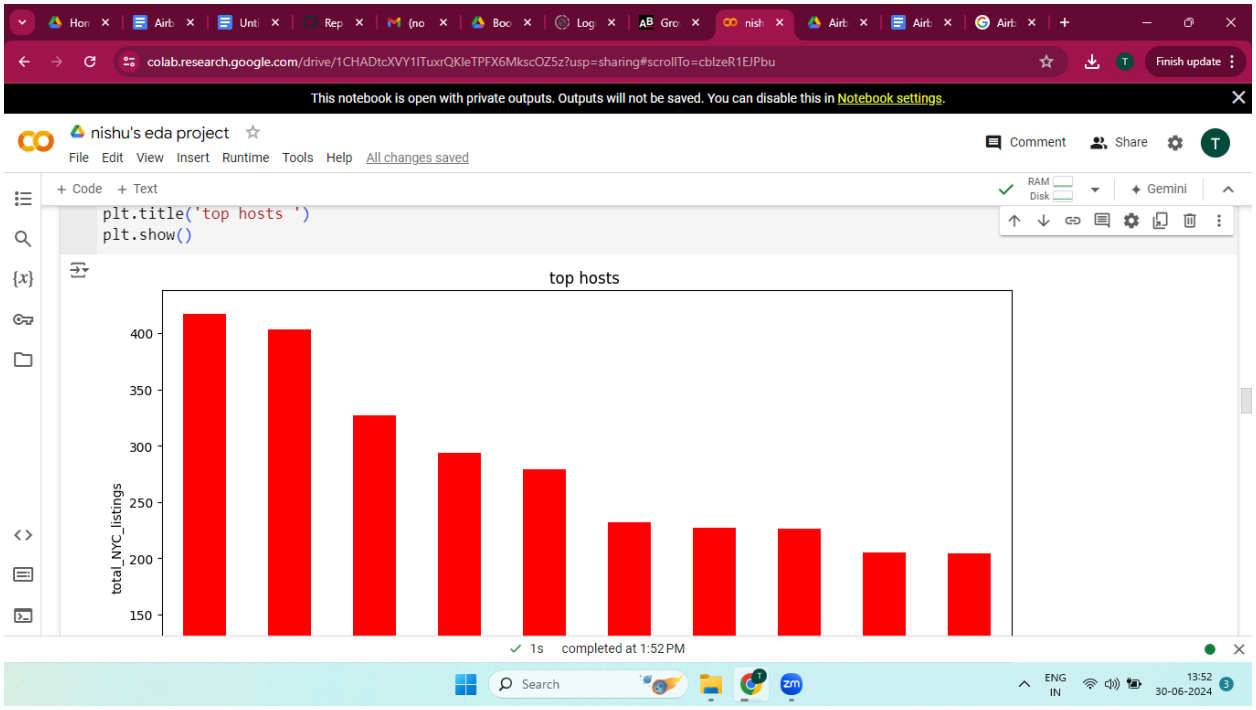


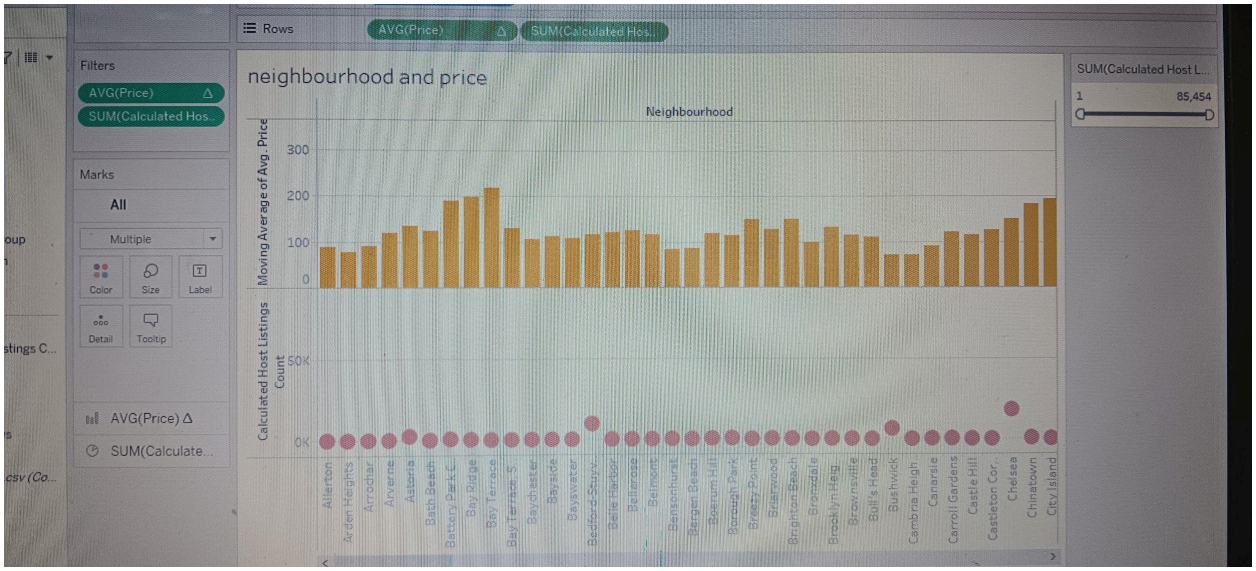
Chart - 3

Chart - 3 visualisation code

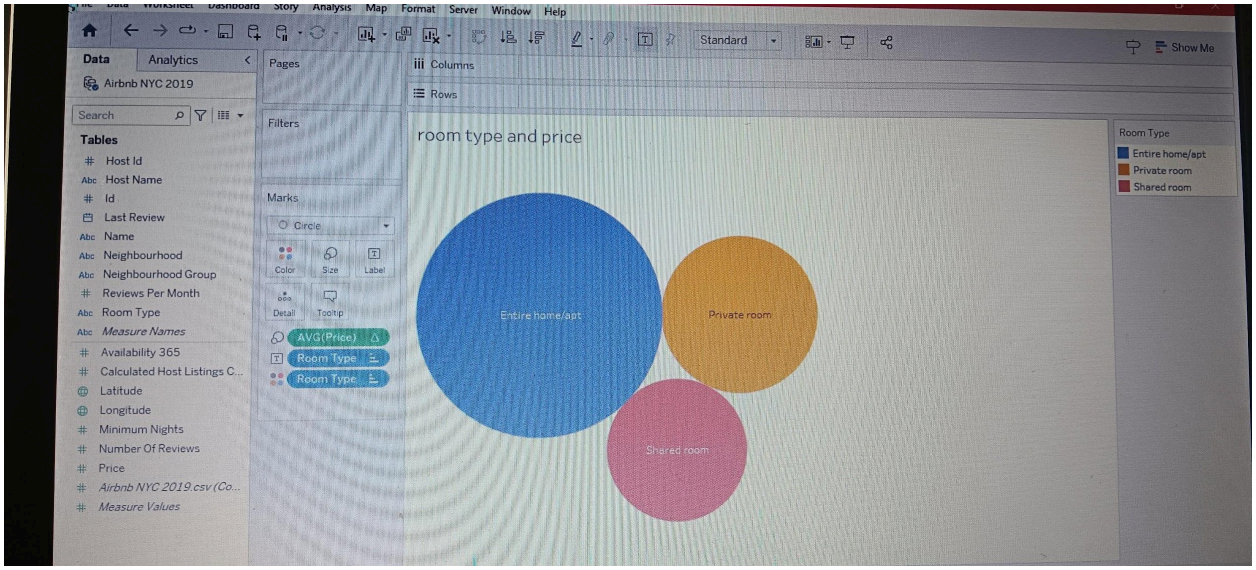
```
top_10_neighbours=df['neighbourhood'].value_counts()[:10]
top_10_neighbours.plot(kind='bar',color='y',figsize=(10,6))
plt.xlabel('neighbourhood')
plt.ylabel('counts in entire NYC')
plt.title('Top 10 neighbourhood in entire NYC on the basis of count of listings')
plt.show()
```

Using tableau :

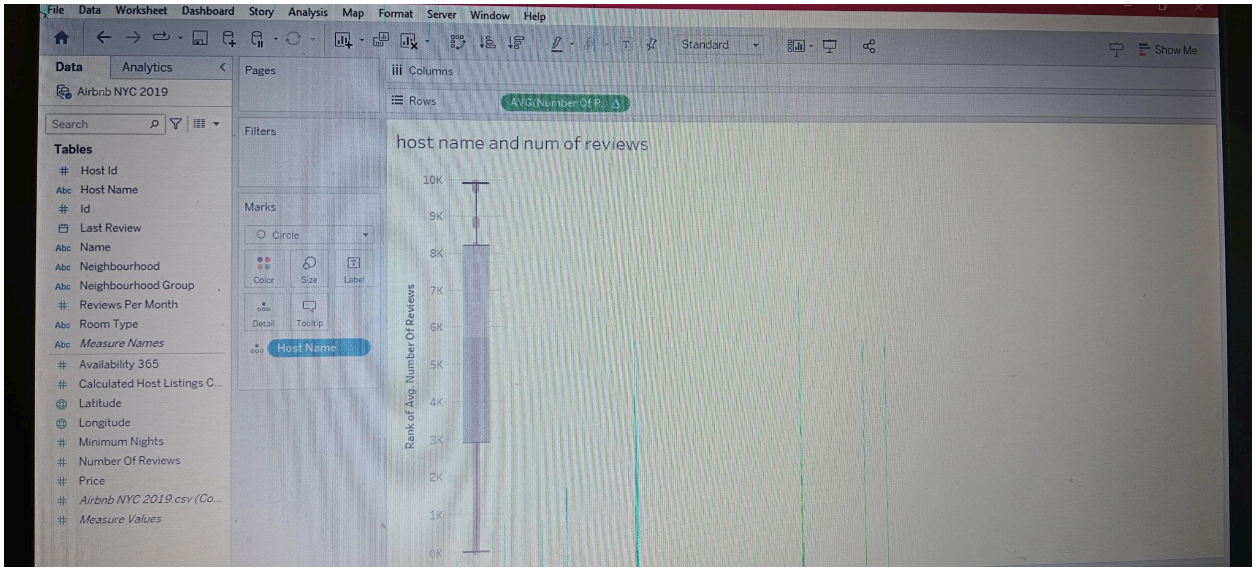
1. neighborhood and price chart using tableau



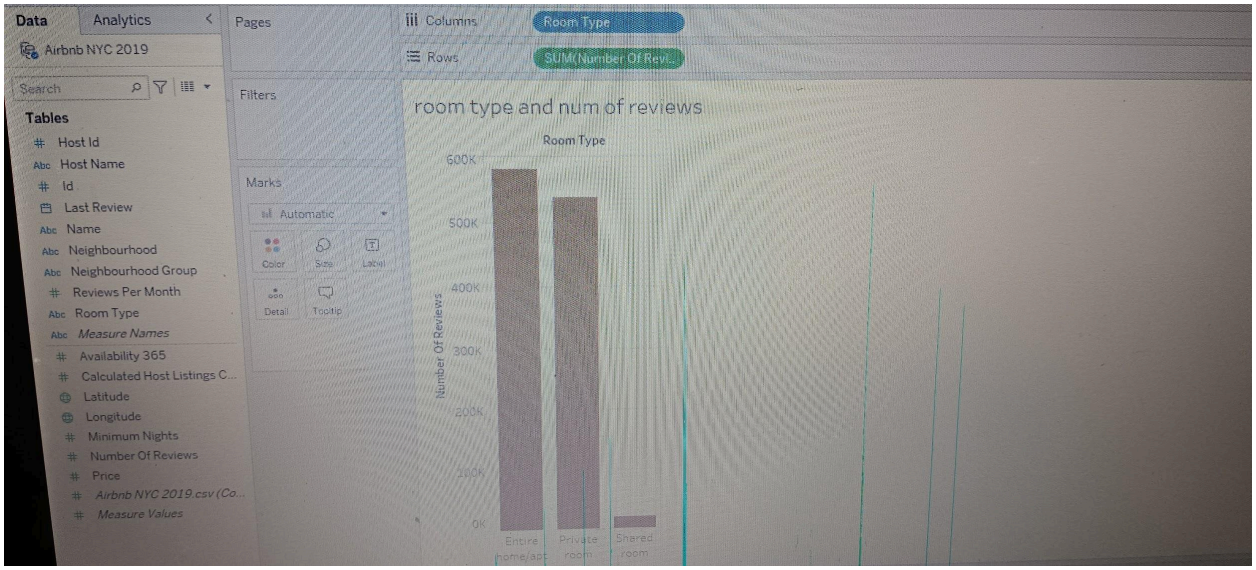
2.room type and price



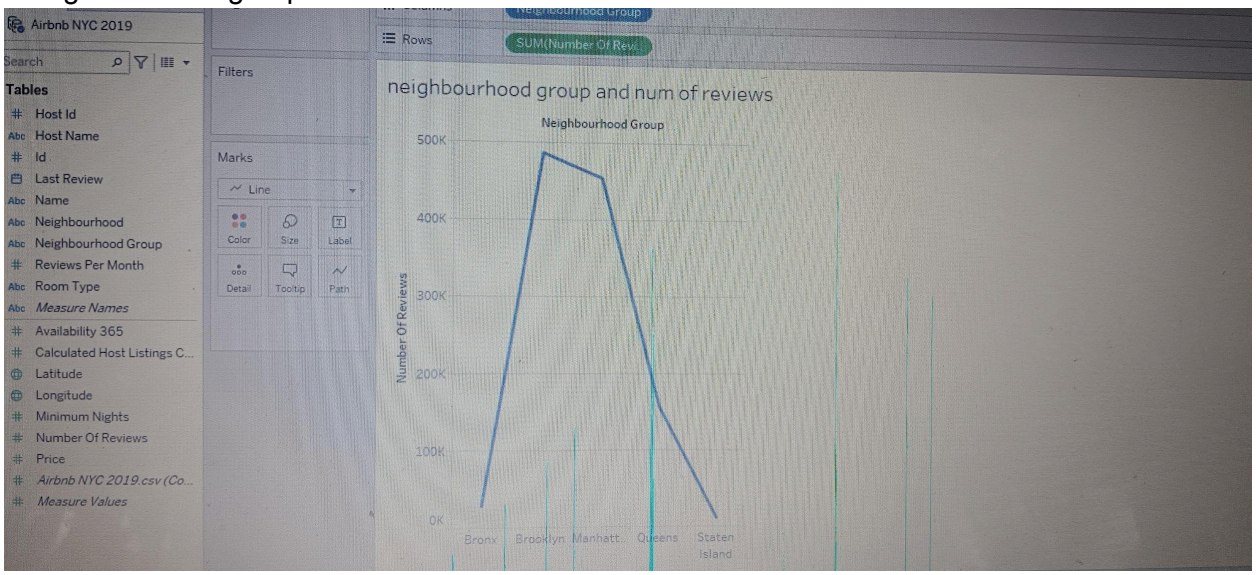
3.host name and num of reviews



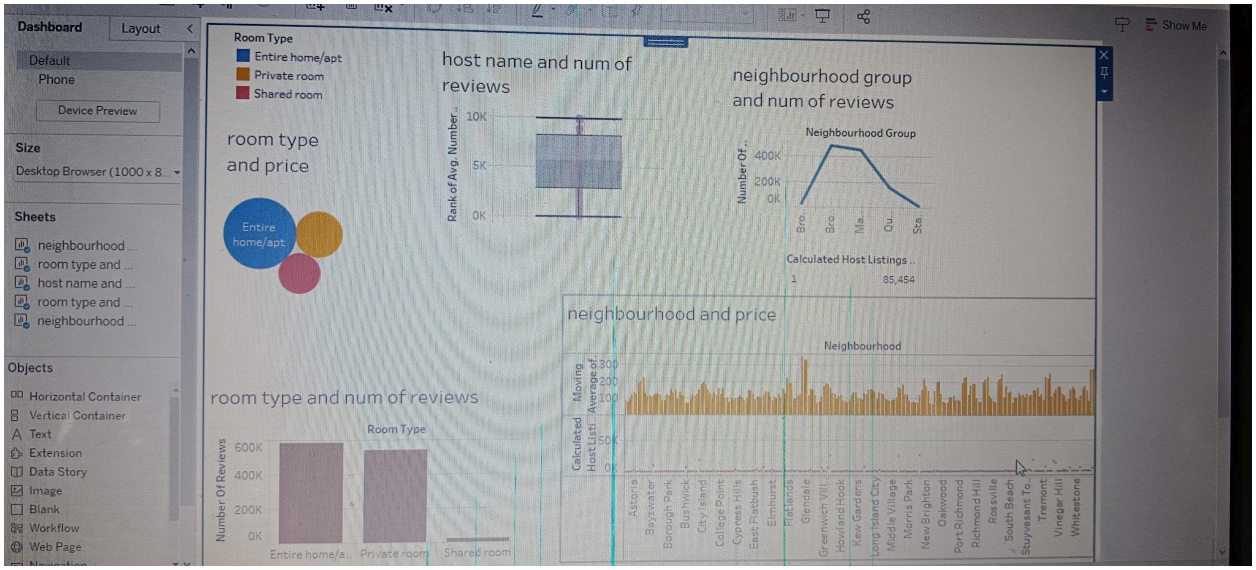
4.room type and num of reviews



5.neighbourhood group and num of reviews



All sheets dashboard



My tableau dashboard link

https://public.tableau.com/views/Book1_17201442190700/Story1?:language=en-US&publish=yes&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link