**Room Types by Neighbourhood Group**

This is a bar graph from the Airbnb dataset, which shows the number of room listings for the various types of rooms in different neighborhood groups in New York City. Given they have the highest number of listings, most are the whole homes or apartments, then private rooms. Queens has a moderate number of listings which include mostly private rooms while the Bronx and Staten Island have the least number of listings. From the graph, it is evident that the availability of rooms and preferences vary from place to place.

**Geographic Distribution of Listings**

This is a scatter plot from the dataset of Airbnb indicating geographical distribution of listing in various neighbourhood groups in New York City. Each colored group of clustered neighbourhoods represents a neighbourhood group. Bronx, Brooklyn, Manhattan, Queens and Staten Island, judging from their latitude and longitude. This graph shows how the listings are scattered around the city, with Manhattan(green) and Brooklyn (red) having densely grouped listings whereas places like Staten Island (purple) and Queens (blue) had spread out site. This helps us to see visually, where the majority of Airbnb listings are situated on city map.

**Price Distribution by Room Type**

This box plot from Airbnb dataset illustrates the distribution of price based on different type of rooms like Entire home / Apartment, Private room, and Shared room. The y-axis is plotted on a log scale. We may notice that, in general, homes/apartments (red) cost much, prices are only above $100 mostly. Private rooms (green) are relatively cheaper while shared rooms (blue) are mostly the lowest priced. The lines of red on its top part are outliers, which are listings with very high prices. From this graph it can be clearly observed that the type of the room has significant impact on the price and the most affordable rooms are the shared ones while the most costly are the entire homes.