From the statistical table and violin graph we can state that Manhattan has the highest range of prices for the listings with $150 price as average observation, followed by Brooklyn with $90 per night. Queens and Staten Island appear to have very similar distributions, Bronx is the cheapest of them all. This distribution and density of prices were completely expected since Manhattan is one of the most expensive places in the world.

From the third graph the observation that is definitely contrasted the most is that 'Shared room' type Airbnb listing is barely available among 10 most listing-populated neighbourhoods. Then, we can see that for these 10 neighbourhoods only 2 boroughs are represented: Manhattan and Brooklyn as Manhattan and Brooklyn are one of the most travelled destinations, therefore would have the most listing availability. We can also observe that Bedford-Stuyvesant and Williamsburg are the most popular for Manhattan borough, and Harlem for Brooklyn

From the density heatmap using latitude and longitude points were able to visualize all NYC listings. We can see that the average price in midtown Manhattan were significantly more compared to others.

From the fifth graph we can observe that finding out and going over top 25 used listings' name words - we are able to see one clear trend. It shows that hosts are simply describing their listing in a short form with very specific terms for easier search for travellers. Such words are 'room', 'bedroom', 'private', 'apartment', 'studio'. There are no catchphrases or 'popular/trending' terms that are used for names; hosts use very simple terms describing the space and the area where the listing is.

From the table output, we can observe that top 10 most reviewed listings on Airbnb for NYC has price average of $65 with most of the listings under \$50, and 9/10 of them are 'Private room' type; top reviewed listing has 629 reviews.

From the sixth graph we can see though Staten Island have less listings, the properties listed have the most reviews and to a stark contrast we can see the Manhattan with the most listings have least number of reviews

From the next graph we can see the most of the listing are for entire home and shared room having the least listings

The eight graph typically depicts the average prices of the listings. From it we can observe for all the available room types Manhattan is more expensive. The entire homes had a higher average price and there is no noticeable difference in price for the other room type across all boroughs(Except Manhattan)

The last graph concludes that people renting out entire home stay at an average 8 days and people renting out private rooms stay the least amount of time

From the correlation matrix It looks like the price is more related to the location and room type, which agrees with our previous analysis. It is interesting that the calculated\_host\_listings\_count also shows a high correlation with the price.