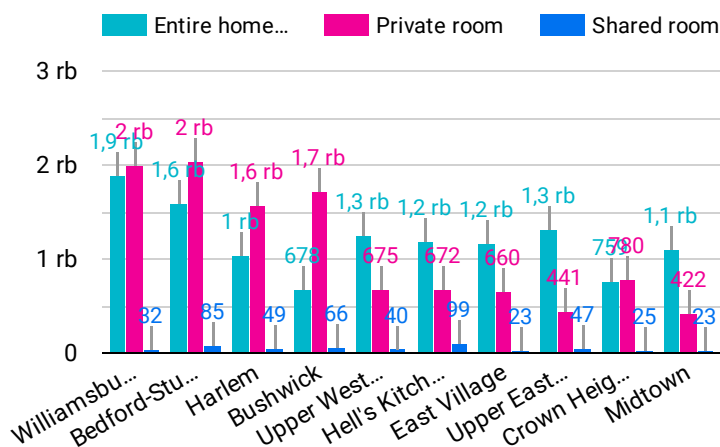
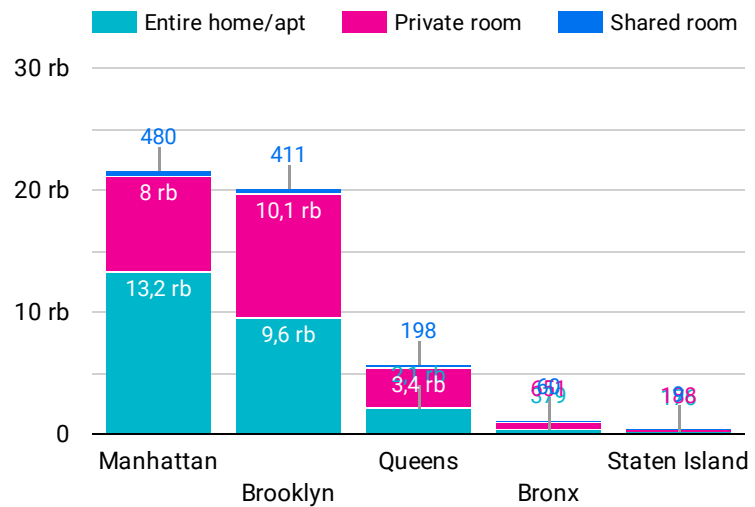


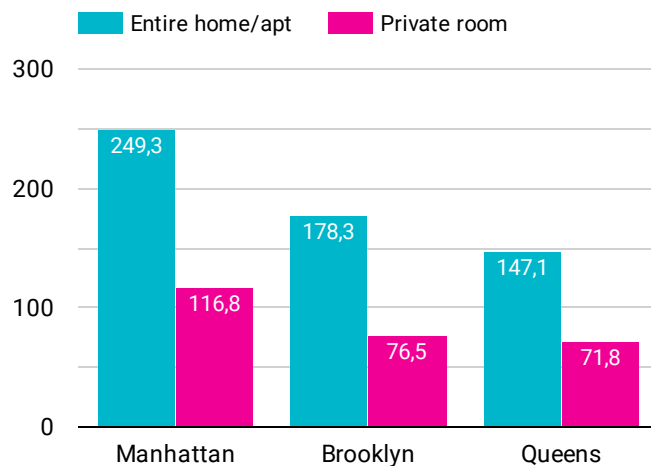
NYC AirBnB

After cleaning the data, we know that there are 3 room types provided in 5 boroughs in NYC. The total listing for each room type in each borough:

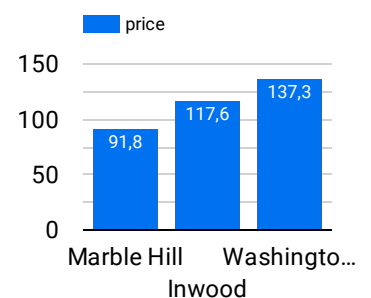
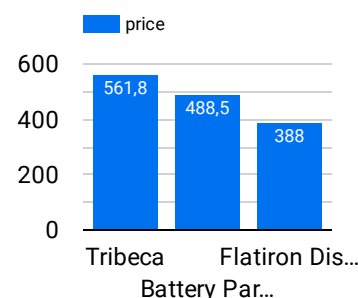
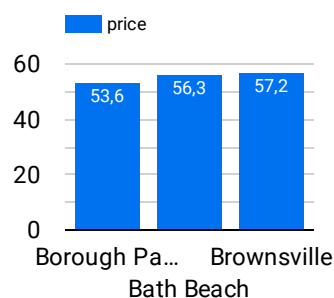
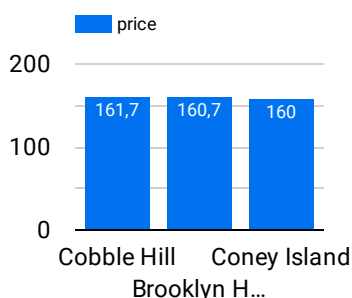


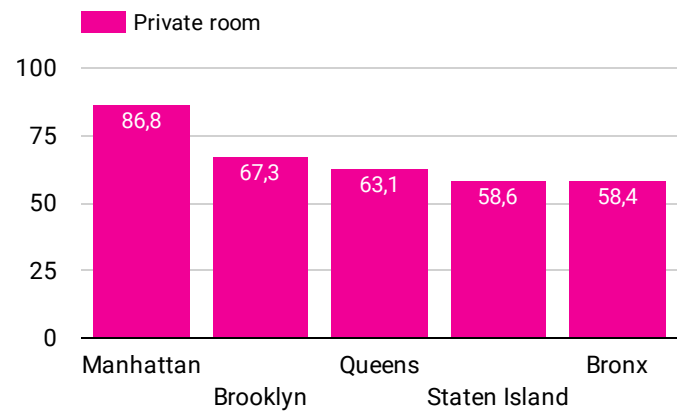
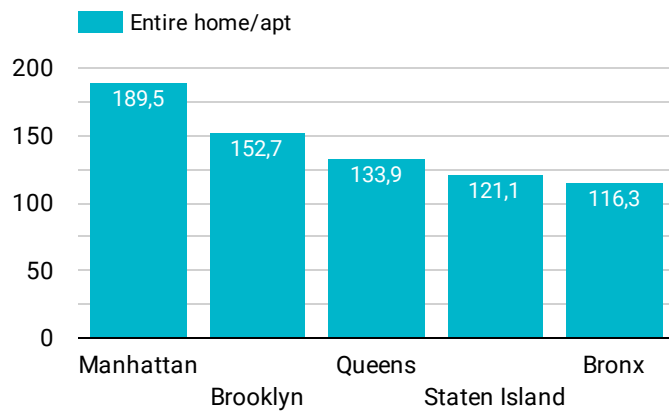
Let's see the top 10 neighborhoods based on the total listing. As expected, the neighborhoods located in Manhattan and Brooklyn

From the total listing, we know that Manhattan, Brooklyn, and Queens provide the most option for Private rooms and Entire homes/apt units. The right diagram shows the average price in the top 3 boroughs.



We know that Manhattan provide the most option for Entire home/apt and Brooklyn provide the most option for Private room. 2 pictures on the left shows top 3 neighborhoods with highest and lowest average price in Brooklyn for Private room; and 2 on the right shows highest and lowest average price for Entire home/apt in Manhattan





From the notebook, we know that the upper extreme price for Entire home/apt is 392 dollars, and 162 dollars for Private room. We assume a unit that prices more than the upper extreme as outliers. The diagram above shows the average price for Entire home/apt and Private room excluding the outliers. Notice that the average price changes significantly from the previous average price diagram.

Now, let's see where the outlier units are located. 3 diagram below shows the top 10 neighborhoods with the most outlier listing for each room type (Entire home/apt on the left, Private room on the right, Shared room on the bottom). Notice that these neighborhoods are located in Manhattan and Brooklyn. That explains the significant average price changes with and without outliers

