Battle of the Neighborhoods

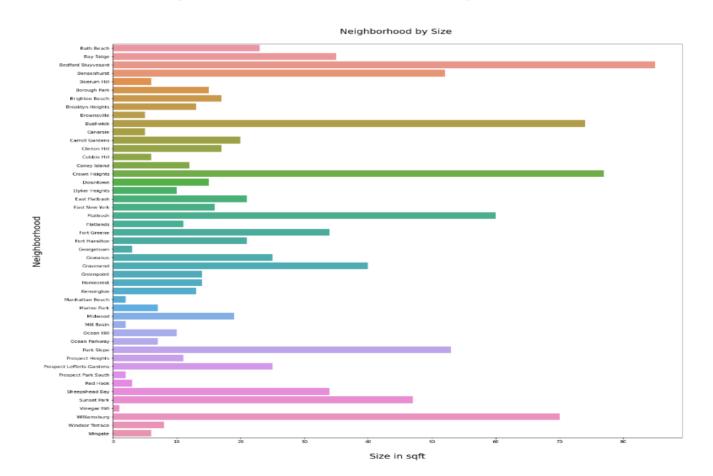
Rental housing properties

Unique Neighborhoods on New York City

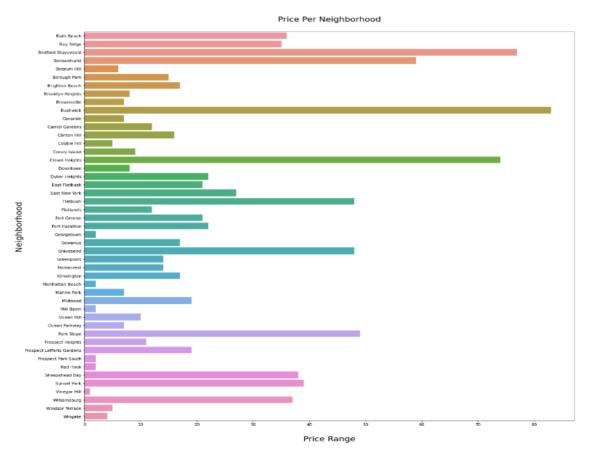
We have 47 unique Neighborhoods in our dataset. Using the folium library, all the contentration of neighborhoods are plotted on the New York City map.



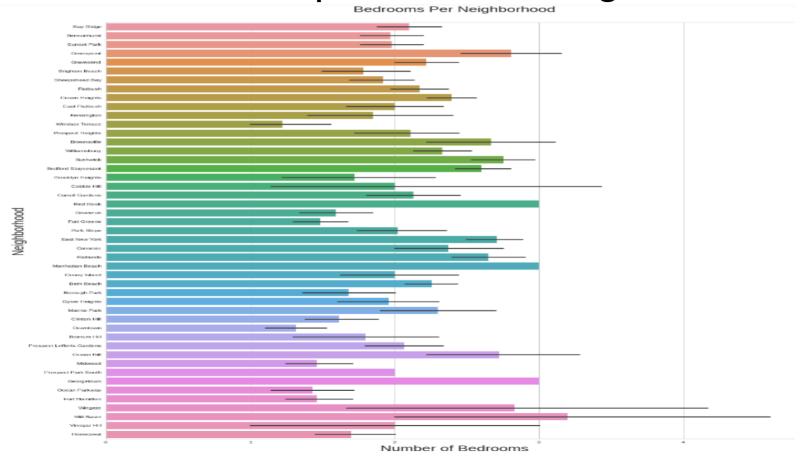
Graphical Representation of Dataset Size of Properties Per Neighborhood



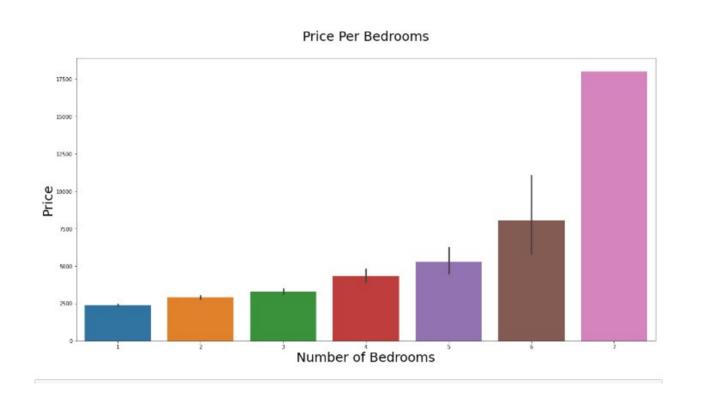
Graphical Representation of Dataset Price of Properties Per Neighborhood



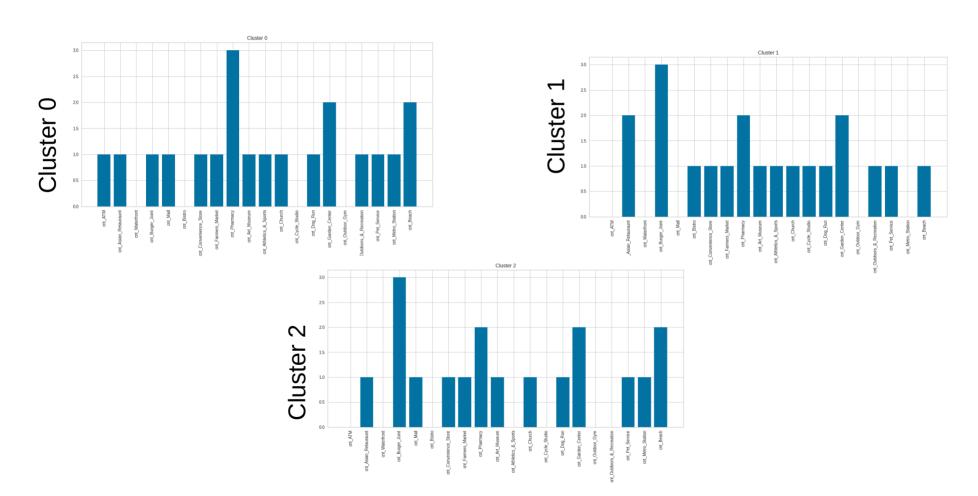
Graphical Representation of Dataset Bedrooms of Properties Per Neighborhood



Graphical Representation of Dataset Price of Properties Per Bedrooms



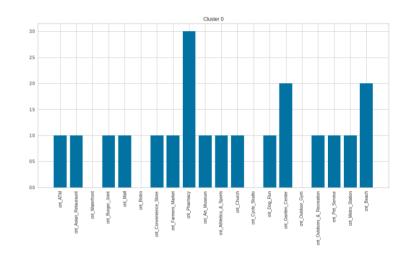
Clustering and Segmentation Using KMeans



Conclusion Clustering and Segmentation (1 of 4)

Based on the clustering exercise, we are able to narrow down to the properties in Cluster 0 because of the following reasons:

- 1. Close proximity to finacial services ATMs
- 2. Quick access to daily need stores Convenience stores and Malls
- 3. Good transporation connectivity Metro Station
- 4. Fitness and Relaxation Oudoor and Recreational places

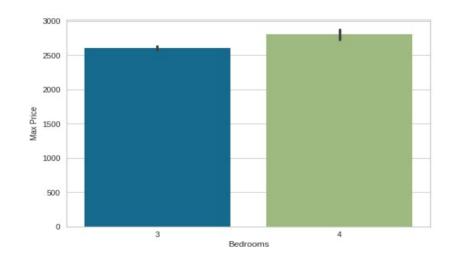


Cluster 0

Conclusion Clustering and Segmentation (2 of 4)

This graph shows that there are:

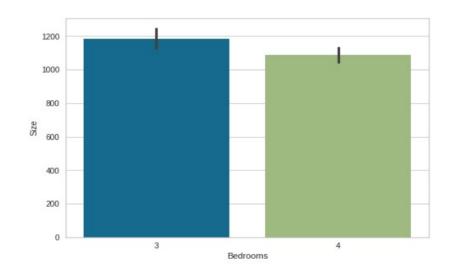
- 1. 3 bedroom set properties within a range of \$2,600
- 2. 4 Bedrooms set properties within a range of \$2,800



Conclusion Clustering and Segmentation (3 of 4)

This graph shows that there are:

- 1. 3 bedroom set properties within a range of 1,800 sqft
- 2. 4 Bedrooms set properties within a range of 1,100 sqft



Conclusion Clustering and Segmentation (4 of 4)

- 1. Based on the properties in Cluster 0, we get properties in specific price and size range with 3 to 4 bedrooms
- 2. These properties are in the price range of: USD 1500-2000 and USD 2500-3500
- 3. In these price ranges, we have options for both both 3 and 4 bedroom properties
- 4. Though the number of bedrooms differ in properties, but there are options within same price range with different number of bedrooms
- 5. These options can help the individual to easily narrow down few proeperties as per their preferences/ constraints and prioritize visits to these properties

Bedrooms	Price Range	Size Range	3	4
0	1500-2500	1000-2000	58	6
1	1500-2500	<=1000	67	4
2	1500-2500	>2000	10	0
3	>2500	1000-2000	75	19
4	>2500	<=1000	72	16
5	>2500	>2000	6	0

Final Conclusion

Best Cluster out of 3

Based on the clustering exercise, we are able to narrow down to the properties in Cluster 0 because o Bedrooms within the range of size 200 sqft - 1800 sqftf the following reasons:

- 1. Close proximity to finacial services ATMs
- 2. Quick access to daily need stores Convenience stores and Malls
- 3. Good transporation connectivity Metro Station
- 4. Fitness and Relaxation Oudoor and Recreational places

This cluster provides us with affordable properties having 3 and 4 bedrooms in a price limit of \$2,800 and with a size range upto 1,800 sqft