Toronto vs. New York neighborhoods

According to tourist aspects

INTRODUCTION

Toronto and New York are the famous places in the world. They are diverse in many ways. Both are multicultural as well as the financial hubs of their respective countries.

We want to explore how much they are similar or dissimilar in aspects from a tourist point of view regarding food, accommodation, beautiful places, and many more.

DATA DESCRIPTION

For this problem, we will get the services of Foursquare API to explore the data of two cities, in terms of their neighborhoods. The data also include the information about the places around each neighborhood like restaurants, hotels, coffee shops, parks, theaters, art galleries, museums and many more.

METHODOLOGY

We selected one Borough from each city to analyze their neighborhoods. Manhattan from New York and Downtown Toronto from Toronto. Then, we will use machine learning technique, "Clustering" to segment the neighborhoods with similar objects on the basis of each neighborhood data. These objects will be given priority on the basis of foot traffic (activity) in their respective neighborhoods. This will help to locate the tourist's areas and hubs, and then we can judge the similarity or dissimilarity between two cities on that basis.

As we have selected two cities Borough to explore their neighborhoods. The data exploration, analysis and visualization for both boroughs are done in the same way but separately.

PROCESSING

Toronto data sorted by Downtown Toronto borough

	Borough	Neighborhood	Latitude	Longitude
0	Downtown Toronto	Regent Park, Harbourfront	43.654260	-79.360636
1	Downtown Toronto	Queen's Park	43.662301	-79.389494
2	Downtown Toronto	Garden District, Ryerson	43.657162	-79.378937
3	Downtown Toronto	St. James Town	43.651494	-79.375418
4	Downtown Toronto	Berczy Park	43.644771	-79.373306

Downtown Toronto Geographic Coordinates:
Latitude: 43.6563221
Longitude: -79.3809161

New York data sorted by Manhattan borough

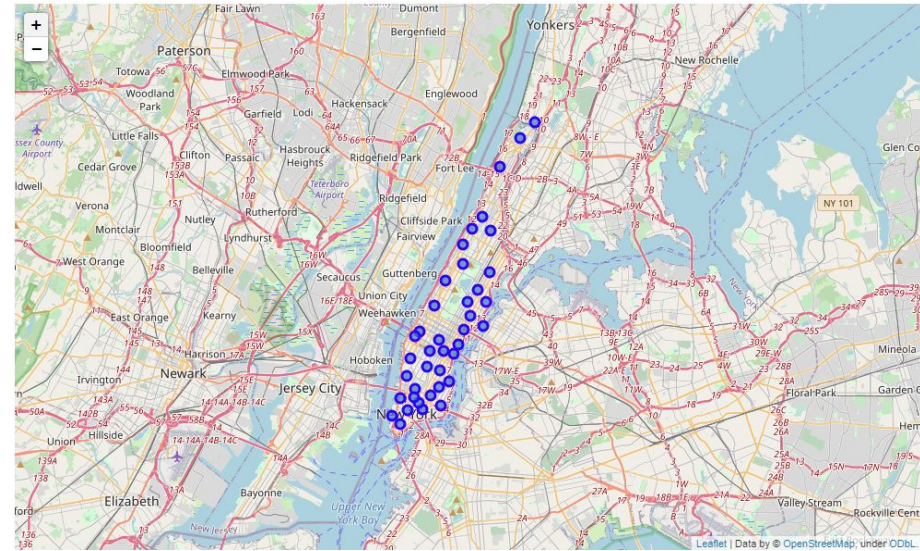|	Borough	Neighborhood	Latitude	Longitude
0	Manhattan	Marble Hill	40.876551	-73.910660
1	Manhattan	Chinatown	40.715618	-73.994279
2	Manhattan	Washington Heights	40.851903	-73.936900
3	Manhattan	Inwood	40.867684	-73.921210
4	Manhattan	Hamilton Heights	40.823604	-73.949688

Manhattan Geographic Coordinates:
Latitude: 40.7896239
Longitude: -73.9598939
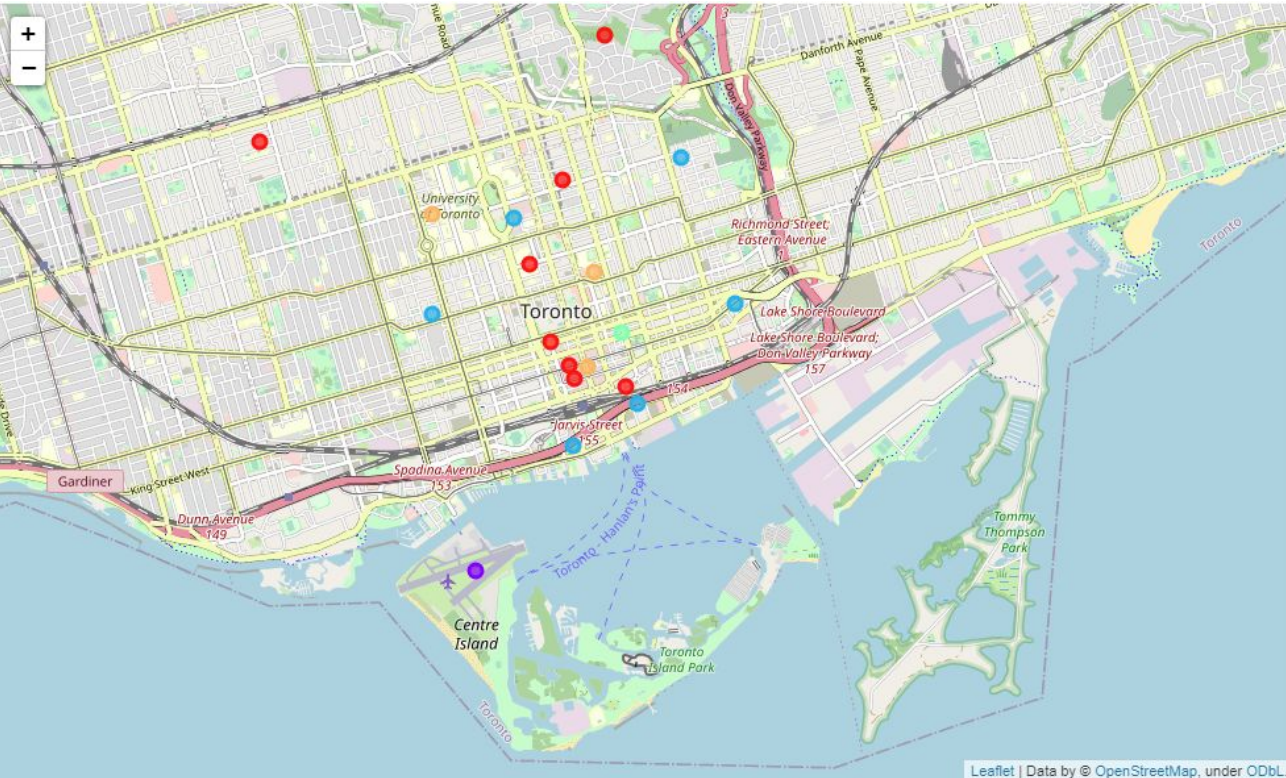
VISUALIZATION

Downtown Toronto before clustering

Manhattan before clustering
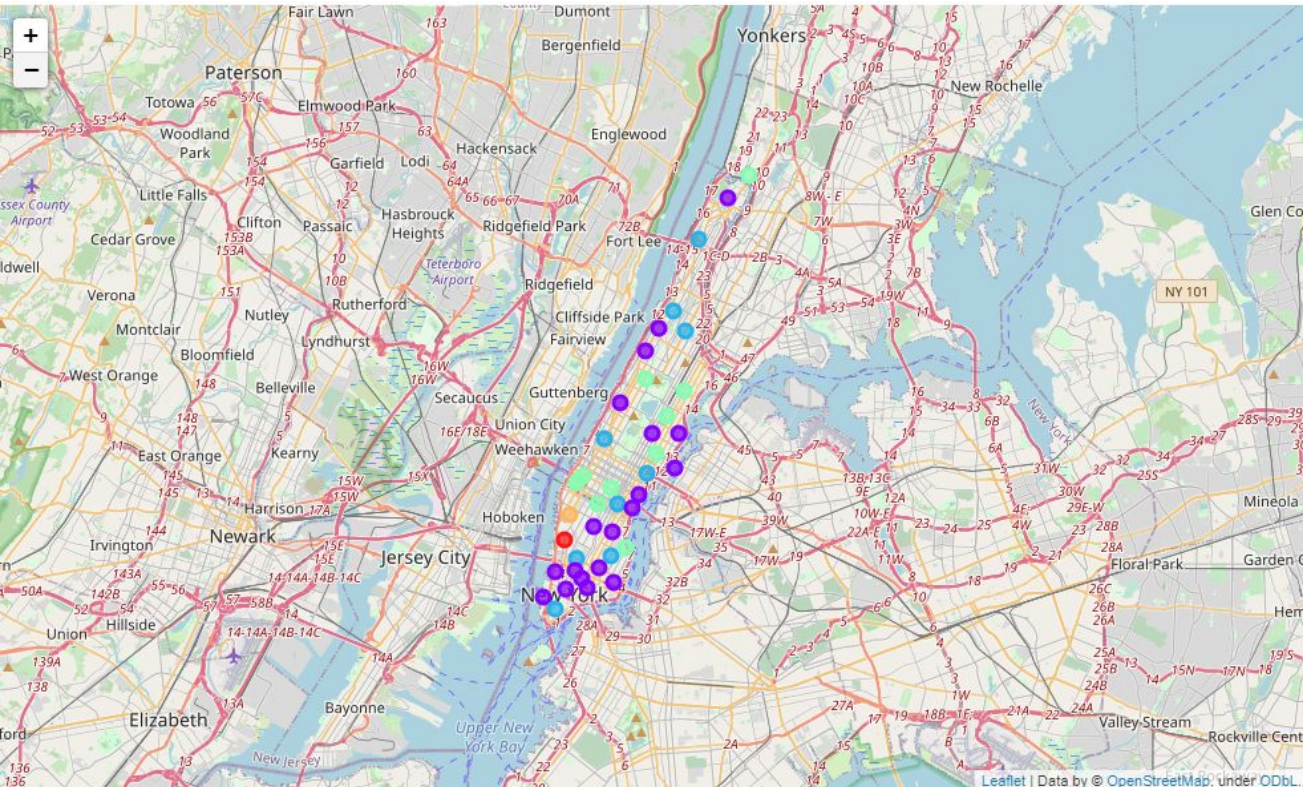
CLUSTERING – DOWNTOWN TORONTO

5 different clusters:

1. Airport Lounge, Coffee Shop, Cafe, Restaurants & Grocery Store
2. Gastropubs
3. Cafes
4. Coffee Shop, Cafe, Park & Japanese Restaurant
5. Seafood, steakhouse, Hotel & Cafe

CLUSTERING – MANHATTAN

5 different clusters:

1. Residential
2. Commercial Places
3. Tourist Areas
4. Center Activity
5. Cultural & Going out places

RESULTS & RECOMMENDATIONS

When we compare the tourist places, we observe that the historical place is only situated in Downtown Toronto and the Monument or landmark venue is in Manhattan neighborhoods. Similarly, Airport facility, Harbor, Sculpture garden and Boat or ferry services are also available in Downtown Toronto while venues like Nightlife, Climbing gym and Museums are present in Manhattan.

After clustering the data of the respective neighborhoods, both cities have venues which can be explored and attract the Tourists. The neighborhoods are much similar in features like Theaters, opera houses, food places, clubs, museums, parks etc. As far as concern to dissimilarity, it differs in terms of some unique places like historical places and monuments.

As far as concern to recommendations, we recommend Downtown Toronto Neighborhoods will be considered first to visit. The tourists have an easily travelling access due to Airport facility, which not only saves time but also helps to save money. This saved money can be utilized to explore more, the attracting venues.

CONCLUSION

The Downtown Toronto and Manhattan neighborhoods have more like similar venues. As we know that every place is unique in its own way, so that's argument is present in both neighborhoods. The dissimilarity exists in terms of some different venues and facilities but not on a larger extent.