Comparison between neighborhoods of New York City and the city of Toronto

1-Introduction

1.1-Background

New York city is most populous city in United Sates with 86 lakh population and same way Toronto is capital city of capital of the province of Ontario, is a major Canadian city with 27 lakh population.

Living cost and many other parameters are high in New York in comparison of Toronto while both are same level city in their respective countries.

As we know that prosperity of neighborhoods of any country creates life standard of that country. In this project I would like to do analysis on neighborhoods of each country so that we can compare how neighborhoods of one country is different from neighborhoods of another country.

1.2 Problem

if any investor has investing strategy for one country and now he wants to invest in different country then he would have to change his strategy according to new country.

In this project I will dig out some specific pattern in neighborhoods of both and will investigate about specific properties of Neighborhoods of both countries E.g. (Diversity of neighborhoods of both Countries, Capital strength of neighborhoods,) which will help them to make strategy accordingly

2. Data acquisition and cleaning

2.1- Data sources

Data has been taken form below resources:

- 1- New York data will be scraped from below link https://cocl.us/new york dataset
- 2-Toronto Data will be scraped form below link

https://en.wikipedia.org/wiki/List of postal codes of Canada: M

- 3-geocoder package for collecting Postal code, latitudes, longitudes of Neighborhoods.
- 4-We will use **Foursquare API** for collecting venues data of New York and Toronto within 500 meter radius.

2.2- Data cleaning and Preprocessing

From above URL we get raw data where many rows have Borough and Neighborhoods as 'Not Assigned'.

We will drop those rows where Borough is not assigned.

We will replace value of Neighborhoods with name of Borough if Neighborhoods is not assigned.

We will put all neighborhoods in same cell if postal code is same.