Battle of Vendors

For IBM Applied Data Science

Introduction

New York and Toronto are some of the largest cities in North America. Those who live or have business in North America may want to compare what each city has to offer to allow them to decide weather to live or set up a business in either city. There are a lot of things that we can use Data Science to compare between the two metropoles but frankly, I am trying to finish this project before midnight so I don't have to renew the Coursera subscription. So, we will only focus on Vendors.

Interested Parties

• Those who are deciding to live in either New York or Toronto
• Business which would like to expand to either metropoles but need to know the competition, or lack their of, that they'll be facing
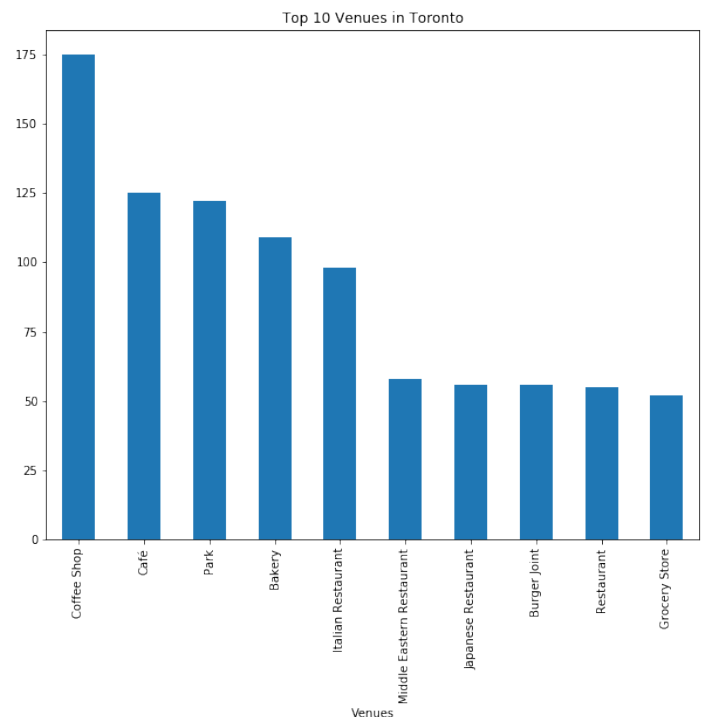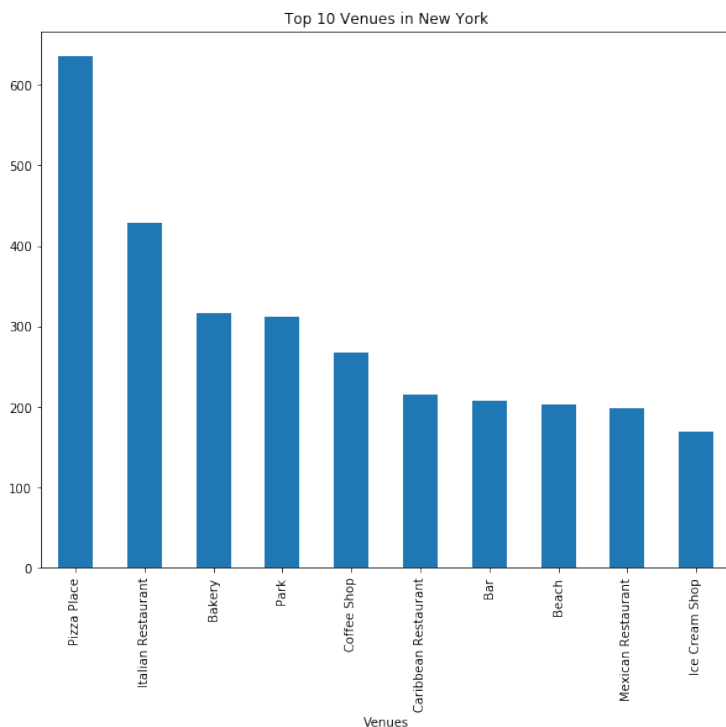
Data

• **FourSquare API**: FourSquare.com, consists of one of the largest databases of venues.
• **New York Data:** https://geo.nyu.edu/catalog/nyu_2451_34572, consists of New York neighborhood names and coordinates.
• **Toronto Data:** https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M, consists of New York neighborhoods. We will have to use https://cocl.us/Geospatial_data to get the coordinates.

Methodology

I used the foursquare data from New York and Toronto to compare the types of venues there are in each city and how many of each venue there are in each city. Once I pulled the neighborhood data for New York and Toronto, I proceeded to use the foursquare api to run through all the neighborhoods in each city to find the venues and create a table of how many venues are in each city and then I proceeded to create a bar graph of the top ten venues for each city. It looks like New York has more places to each out while Toronto has more places to take of oneself, such as grocery stores and pharmacies.

Results

As the charts, show there are a lot higher volume of venues in New York as there are in Toronto. Also, New York has more places to eat out, while Toronto has a higher percentage of places for grocery shopping and different nationality's restaurants.

Discussion

I believe more research is needed into different other fields to really answer the question of weather New York or Toronto is a better fit for either an individual or business. I would probably look into visiting data for each venue to see what's popular. It seems that Toronto is lacking behind in venues compared to New York, but it just might be that the people currently living in Toronto are not interested in the venues as much as the people in New York.

Conclusion

From the data compiled by this report, it seems that New York is for more outgoing people. There are a lot of venues to hang out at and visit. Toronto on the other hand, might be more suitable for businesses to expand into to take advantage of lacking amount of venues. However, as I mentioned in the discussion, more research is needed to find out weather such a move would be wise or not.