The Battle of Neighbourhoods

Relocate to Toronto, Ontario

-- The Optimal Neighbourhood

INTRODUCTION

THE PROBLEM:

- Mr.X recently relocate to Toronto, Ontario with his family.
 He has very few information about the Toronto
 neighbourhoods, and he would like to know which would
 be the best neighbourhood for him to live.
- For this optimal neighbourhood, Mr.X hopes it will have great amenities, for example easy access to grocery stores, restaurants, parks, and recreations.
- Another bonus criteria is easy access to public transportation.

INTRODUCTION

THE OBJECTIVE:

This report is aimed at analyzing the neighbourhoods metrics of Toronto, grouping neighbourhoods into similar clusters, and enumerating some neighbourhoods that meet the criteria.

THE STAKEHOLDERS OF THIS REPORT WILL BE:

- 1) people who are interested in relocating to Toronto and not familiar with this city
- 2) people who are interested in moving to a neighbourhood in Toronto with greater amenities than they live in now.

DATA DESCRIPTION

- For this report, I will use the following data:
 - 1) to obatain data about the Toronto neighborhoods and boroughs:

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

- 2) to obtain data about the Toronto neighbourhoods' geographical coordinates: http://cocl.us/Geospatial_data
- 3) to obtain venues details: Foursquare API
- 4) to obtain coordinates of specific locations: Google Maps API

METHODOLOGY

First 10 rows of a dataframe that contains boroughs, neighbourhoods, and geographical coordinates of the city of Toronto

	Postcode	Borough	Neighborhood	Postal Code	Latitude	Longitude
0	МЗА	North York	Parkwoods	МЗА	43.753259	-79.329656
1	M4A	North York	Victoria Village	M4A	43.725882	-79.315572
2	М5А	Downtown Toronto	Harbourfront	M5A	43.654260	-79.360636
3	М6А	North York	Lawrence Heights,Lawrence Manor	M6A	43.718518	-79.464763
4	М7А	Downtown Toronto	Queen's Park	М7А	43.662301	-79.389494
5	M9A	Queen's Park	Queen's Park	М9А	43.667856	-79.532242
6	M1B	Scarborough	Rouge,Malvern	M1B	43.806686	-79.194353
7	МЗВ	North York	Don Mills North	МЗВ	43.745906	-79.352188
8	M4B	East York	Woodbine Gardens,Parkview Hill	M4B	43.706397	-79.309937
9	М5В	Downtown Toronto	Ryerson,Garden District	м5В	43.657162	-79.378937

METHODOLOGY

Use Folium to generate a map of Toronto with all neighbourhoods and boroughs.



METHODOLOGY

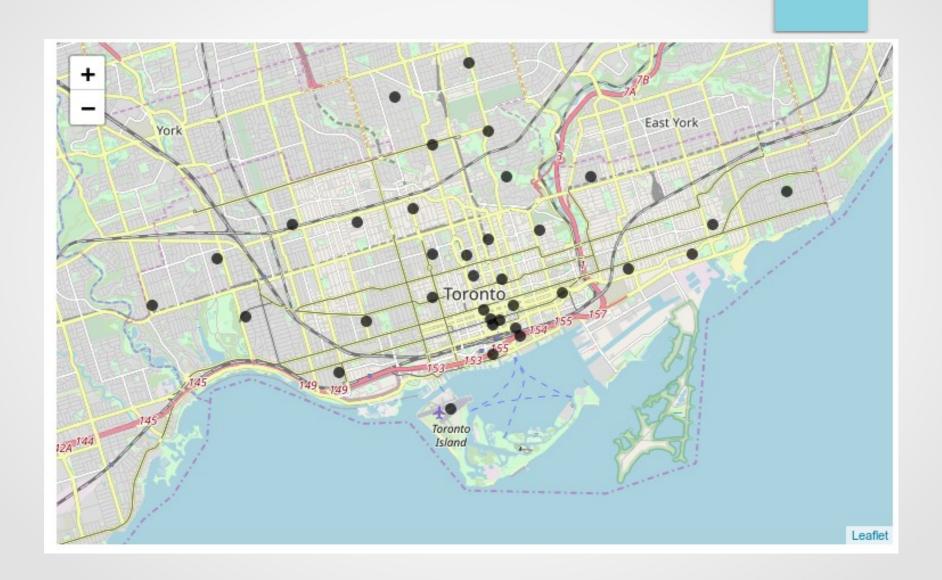
Use Foursquare API to generate top 10 venues for each neighbour in Toronto. (below is an example of top 10 venues in Harbourfront neighbourhood.

	name	categories	lat	Ing	
0	Roselle Desserts	Bakery	43.653447	-79.362017	
1	Tandem Coffee	Coffee Shop	43.653559	-79.361809	
2	Cooper Koo Family YMCA	Gym / Fitness Center	43.653191	-79.357947	
3	Body Blitz Spa East	Spa	43.654735	-79.359874	
4	Impact Kitchen	Restaurant	43.656369	-79.356980 -79.361149 -79.358967 -79.356211	
5	Morning Glory Cafe	Breakfast Spot	43.653947		
6	Dominion Pub and Kitchen	Pub	43.656919		
7	Corktown Common	Park	43.655618		
8	The Distillery Historic District	Historic Site	43.650244	-79.359323	
9	Figs Breakfast & Lunch	Breakfast Spot	43.655675	-79.364503	

RESULTS

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Adelaide,King,Richmond	Coffee Shop	Café	Bar	Steakhouse	Burger Joint	Sushi Restaurant	Hotel	Thai Restaurant	Asian Restaurant	Pizza Place
1	Berczy Park	Coffee Shop	Cocktail Bar	Steakhouse	Cheese Shop	Café	Farmers Market	Beer Bar	Bakery	Seafood Restaurant	Gourmet Shop
2	Brockton,Exhibition Place,Parkdale Village	Café	Coffee Shop	Breakfast Spot	Yoga Studio	Bakery	Gym	Furniture / Home Store	Intersection	Italian Restaurant	Convenience Store
3	Business Reply Mail Processing Centre 969 Eastern	Light Rail Station	Pizza Place	Smoke Shop	Brewery	Spa	Farmers Market	Fast Food Restaurant	Burrito Place	Restaurant	Recording Studio
4	CN Tower,Bathurst Quay,Island airport,Harbourf	Airport Terminal	Airport Lounge	Airport Service	Harbor / Marina	Rental Car Location	Sculpture Garden	Boat or Ferry	Bar	Boutique	Airport
5	Cabbagetown,St. James Town	Coffee Shop	Italian Restaurant	Café	Bakery	Park	Pizza Place	Pub	Restaurant	Liquor Store	Playground
6	Central Bay Street	Coffee Shop	Café	Italian Restaurant	Japanese Restaurant	Ice Cream Shop	Burger Joint	Sandwich Place	Salad Place	Gym / Fitness Center	Juice Bar
7	Chinatown,Grange Park,Kensington Market	Café	Vietnamese Restaurant	Vegetarian / Vegan Restaurant	Dumpling Restaurant	Coffee Shop	Chinese Restaurant	Bar	Bakery	Mexican Restaurant	Noodle House
8	Christie	Grocery Store	Café	Park	Nightclub	Restaurant	Diner	Baby Store	Athletics & Sports	Italian Restaurant	Candy Store
9	Church and Wellesley	Coffee Shop	Sushi Restaurant	Japanese Restaurant	Gay Bar	Restaurant	Yoga Studio	Men's Store	Pizza Place	Café	Burger Joint

RESULTS



CONCLUSION

- Based on examining each cluster of neighbourhoods, there are at least two options for Mr.X:
- 1) Christie in Downtown Toronto:
 - -- grocery stores, restaurants, and parks nearby

- 2) Business Reply Mail Processing Centre 969 in East Toronto:
 - -- easy access to Toronto Light Rail, certain amount of grocery stores, restaurants, and some recreations nearby