

Coursera Capstone – The Battles of Neighborhoods

Introduction:

Toronto is the capital city of the Canadian province of Ontario. With a recorded population of 2,731,571 in 2016, it is the most populous city in Canada and the fourth most populous city in North America.

The city is the anchor of the Golden Horseshoe, an urban agglomeration of 9,245,438 people (as of 2016) surrounding the western end of Lake Ontario, while the Greater Toronto Area (GTA) proper had a 2016 population of 6,417,516. Toronto is an international centre of business, finance, arts, and culture, and is recognized as one of the most multicultural and cosmopolitan cities in the world.

The Neighborhoods in Toronto:

	PostalCode	Borough	Neighborhood
0	M3A	North York	Parkwoods
1	M4A	North York	Victoria Village
2	M5A	Downtown Toronto	Regent Park, Harbourfront
3	M6A	North York	Lawrence Manor, Lawrence Heights
4	M7A	Queen's Park	Ontario Provincial Government
5	M9A	Etobicoke	Islington Avenue
6	M1B	Scarborough	Malvern, Rouge
7	M3B	North York	Don Mills North
8	M4B	East York	Parkview Hill, Woodbine Gardens
9	M5B	Downtown Toronto	Garden District, Ryerson
10	M6B	North York	Glencairn
11	M9B	Etobicoke	West Deane Park, Princess Gardens, Martin Grov...
12	M1C	Scarborough	Rouge Hill, Port Union, Highland Creek
13	M3C	North York	Don Mills South
14	M4C	East York	Woodbine Heights
15	M5C	Downtown Toronto	St. James Town
16	M6C	York	Humewood-Cedarvale
17	M9C	Etobicoke	Eringate, Bloordale Gardens, Old Burnhamthorpe...
18	M1E	Scarborough	Guildwood, Morningside, West Hill
19	M4E	East Toronto	The Beaches
20	M5E	Downtown Toronto	Berczy Park
21	M6E	York	Caledonia-Fairbanks
22	M1G	Scarborough	Woburn
23	M4G	East York	Leaside
24	M5G	Downtown Toronto	Central Bay Street
25	M6G	Downtown Toronto	Christie
26	M1H	Scarborough	Cedarbrae
27	M2H	North York	Hillcrest Village
28	M3H	North York	Bathurst Manor, Wilson Heights, Downsview North

With Latitude and Longitude:

	PostalCode	Borough	Neighborhood	Latitude	Longitude
0	M3A	North York	Parkwoods	43.7545	-79.3300
1	M4A	North York	Victoria Village	43.7276	-79.3148
2	M5A	Downtown Toronto	Regent Park, Harbourfront	43.6555	-79.3626
3	M6A	North York	Lawrence Manor, Lawrence Heights	43.7223	-79.4504
4	M7A	Queen's Park	Ontario Provincial Government	43.6641	-79.3889
5	M9A	Etobicoke	Islington Avenue	43.6662	-79.5282
6	M1B	Scarborough	Malvern, Rouge	43.8113	-79.1930
7	M3B	North York	Don Mills North	43.7450	-79.3590
8	M4B	East York	Parkview Hill, Woodbine Gardens	43.7063	-79.3094
9	M5B	Downtown Toronto	Garden District, Ryerson	43.6572	-79.3783
10	M6B	North York	Glencairn	43.7081	-79.4479
11	M9B	Etobicoke	West Deane Park, Princess Gardens, Martin Grov...	43.6505	-79.5517
12	M1C	Scarborough	Rouge Hill, Port Union, Highland Creek	43.7878	-79.1564
13	M3C	North York	Don Mills South	43.7334	-79.3329
14	M4C	East York	Woodbine Heights	43.6913	-79.3116
15	M5C	Downtown Toronto	St. James Town	43.6513	-79.3756
16	M6C	York	Humewood-Cedarvale	43.6915	-79.4307
17	M9C	Etobicoke	Eringate, Bloordale Gardens, Old Burnhamthorpe...	43.6437	-79.5767
18	M1E	Scarborough	Guildwood, Morningside, West Hill	43.7678	-79.1866
19	M4E	East Toronto	The Beaches	43.6784	-79.2941
20	M5E	Downtown Toronto	Berczy Park	43.6456	-79.3754
21	M6E	York	Caledonia-Fairbanks	43.6889	-79.4507
22	M1G	Scarborough	Woburn	43.7712	-79.2144
23	M4G	East York	Leaside	43.7124	-79.3644
24	M5G	Downtown Toronto	Central Bay Street	43.6564	-79.3860
25	M6G	Downtown Toronto	Christie	43.6683	-79.4205
26	M1H	Scarborough	Cedarbrae	43.7686	-79.2389
27	M2H	North York	Hillcrest Village	43.8015	-79.3577
28	M3H	North York	Bathurst Manor, Wilson Heights, Downsview North	43.7535	-79.4472
29	M4H	East York	Thorncliffe Park	43.7059	-79.3464

Add Venue Category:

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Regent Park, Harbourfront	43.6555	-79.3626	Tandem Coffee	43.653559	-79.361809	Coffee Shop
1	Regent Park, Harbourfront	43.6555	-79.3626	Roselle Desserts	43.653447	-79.362017	Bakery
2	Regent Park, Harbourfront	43.6555	-79.3626	Souvlaki Express	43.655584	-79.364438	Greek Restaurant
3	Regent Park, Harbourfront	43.6555	-79.3626	Berkeley Church	43.655123	-79.365873	Event Space
4	Regent Park, Harbourfront	43.6555	-79.3626	Figs Breakfast & Lunch	43.655675	-79.364503	Breakfast Spot

	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Neighborhood						
Berczy Park	75	75	75	75	75	75
CN Tower, King and Spadina, Railway Lands, Harbourfront West, Bathurst Quay, South Niagara, Island airport	58	58	58	58	58	58
Central Bay Street	57	57	57	57	57	57
Christie	9	9	9	9	9	9
Church and Wellesley	68	68	68	68	68	68
Commerce Court, Victoria Hotel	100	100	100	100	100	100
First Canadian Place, Underground city	100	100	100	100	100	100
Garden District, Ryerson	100	100	100	100	100	100
Harbourfront East, Union Station, Toronto Islands	5	5	5	5	5	5
Kensington Market, Chinatown, Grange Park	51	51	51	51	51	51
Regent Park, Harbourfront	22	22	22	22	22	22
Richmond, Adelaide, King	100	100	100	100	100	100
Rosedale	4	4	4	4	4	4
St. James Town	87	87	87	87	87	87
St. James Town, Cabbagetown	31	31	31	31	31	31
Toronto Dominion Centre, Design Exchange	100	100	100	100	100	100
University of Toronto, Harbord	33	33	33	33	33	33

Explore:

	Yoga Studio	Adult Boutique	Afghan Restaurant	American Restaurant	Art Gallery	Arts & Crafts Store	Asian Restaurant	BBQ Joint	Baby Store	Bagel Shop	Bakery	Bank	Bar	Basketball Stadium	Beer Bar	Beer Store	Belgian Restaurant	Bistro	Boat
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neighborhood	Yoga Studio	Adult Boutique	Afghan Restaurant	American Restaurant	Art Gallery	Arts & Crafts Store	Asian Restaurant	BBQ Joint	Baby Store	Bagel Shop	Bakery	Bank	Bar	Basketball Stadium
0	Berczy Park	0.000000	0.000000	0.000000	0.000000	0.026667	0.000000	0.000000	0.000000	0.000000	0.013333	0.040000	0.026667	0.000000	0.000000
1	CN Tower, King and Spadina, Railway Lands, Harbourfront	0.017241	0.000000	0.000000	0.000000	0.000000	0.000000	0.017241	0.000000	0.000000	0.000000	0.034483	0.034483	0.034483	0.000000
2	Central Bay Street	0.000000	0.000000	0.000000	0.000000	0.000000	0.017544	0.000000	0.000000	0.000000	0.000000	0.017544	0.017544	0.000000	0.000000
3	Christie	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.111111	0.000000	0.000000	0.000000	0.000000	0.000000
4	Church and Wellesley	0.014706	0.014706	0.014706	0.014706	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	Commerce Court, Victoria Hotel	0.000000	0.000000	0.000000	0.020000	0.010000	0.000000	0.040000	0.000000	0.000000	0.010000	0.010000	0.040000	0.010000	0.000000
6	First Canadian Place, Underground city	0.000000	0.000000	0.000000	0.020000	0.010000	0.000000	0.040000	0.000000	0.000000	0.010000	0.010000	0.040000	0.010000	0.000000
7	Garden District, Ryerson	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010000	0.030000	0.010000	0.000000
8	Harbourfront East, Union Station, Toronto Islands	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Kensington Market, Chinatown, Grange Park	0.000000	0.000000	0.000000	0.000000	0.039216	0.039216	0.000000	0.000000	0.000000	0.000000	0.039216	0.000000	0.019608	0.000000
10	Regent Park, Harbourfront	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.045455	0.000000	0.000000	0.000000

----Berczy Park----

	venue	freq
0	Sandwich Place	0.07
1	Coffee Shop	0.05
2	Hotel	0.05
3	Cocktail Bar	0.05
4	Beer Bar	0.04

----CN Tower, King and Spadina, Railway Lands, Harbourfront West, Bathurst Quay, South Niagara, Island airport----

	venue	freq
0	Coffee Shop	0.09
1	Italian Restaurant	0.07
2	Wings Joint	0.03
3	Bakery	0.03
4	French Restaurant	0.03

----Central Bay Street----

	venue	freq
0	Coffee Shop	0.21
1	Sandwich Place	0.07
2	Japanese Restaurant	0.05
3	Sushi Restaurant	0.05
4	Pizza Place	0.05

----Christie----

	venue	freq
0	Grocery Store	0.33
1	Café	0.33
2	Park	0.11
3	Baby Store	0.11
4	Coffee Shop	0.11

----Church and Wellesley----

	venue	freq
0	Japanese Restaurant	0.07
1	Sushi Restaurant	0.07
2	Restaurant	0.04
3	Gay Bar	0.04
4	Dance Studio	0.03

----Commerce Court, Victoria Hotel----

	venue	freq
0	Coffee Shop	0.12
1	Café	0.08
2	Sandwich Place	0.07
3	Hotel	0.06
4	Restaurant	0.04

	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	Berczy Park	Sandwich Place	Hotel	Coffee Shop	Cocktail Bar	Japanese Restaurant	Beer Bar	Café	Bakery	Italian Restaurant	Bank
1	CN Tower, King and Spadina, Railway Lands, Har...	Coffee Shop	Italian Restaurant	Wings Joint	Park	Restaurant	Sandwich Place	Speakeasy	Gym / Fitness Center	Pub	French Restaurant
2	Central Bay Street	Coffee Shop	Sandwich Place	Japanese Restaurant	Pizza Place	Sushi Restaurant	Restaurant	Italian Restaurant	Café	Middle Eastern Restaurant	Discount Store
3	Christie	Grocery Store	Café	Park	Coffee Shop	Baby Store	Dessert Shop	Electronics Store	Donut Shop	Doner Restaurant	Distribution Center
4	Church and Wellesley	Sushi Restaurant	Japanese Restaurant	Gay Bar	Restaurant	Burrito Place	Fast Food Restaurant	Indian Restaurant	Mediterranean Restaurant	Dance Studio	Coffee Shop

	PostalCode	Borough	Neighborhood	Latitude	Longitude	Cluster Labels	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
0	M5A	Downtown Toronto	Regent Park, Harbourfront	43.6555	-79.3626	1	Coffee Shop	Restaurant	Beer Store	Wine Shop	Italian Restaurant	Event Space	Electronics Store	Distribution Center
1	M5B	Downtown Toronto	Garden District, Ryerson	43.6572	-79.3783	4	Coffee Shop	Sandwich Place	Clothing Store	Café	Hotel	Cosmetics Shop	Pizza Place	Middle Eastern Restaurant
2	M5C	Downtown Toronto	St. James Town	43.6513	-79.3756	4	Coffee Shop	Italian Restaurant	Café	Cocktail Bar	Restaurant	Clothing Store	Diner	Bakery
3	M5E	Downtown Toronto	Berczy Park	43.6456	-79.3754	4	Sandwich Place	Hotel	Coffee Shop	Cocktail Bar	Japanese Restaurant	Beer Bar	Café	Bakery
4	M5G	Downtown Toronto	Central Bay Street	43.6564	-79.3860	1	Coffee Shop	Sandwich Place	Japanese Restaurant	Pizza Place	Sushi Restaurant	Restaurant	Italian Restaurant	Café

	Borough	Neighborhood	Cluster Labels	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
13	Downtown Toronto	Rosedale	0	Grocery Store	Candy Store	Park	Playground	Donut Shop	Doner Restaurant	Distribution Center	Discount Store	Diner	Dessert Shop

	Borough	Neighborhood	Cluster Labels	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	Downtown Toronto	Regent Park, Harbourfront	1	Coffee Shop	Restaurant	Beer Store	Wine Shop	Italian Restaurant	Event Space	Electronics Store	Distribution Center	Dance Studio	Pub
4	Downtown Toronto	Central Bay Street	1	Coffee Shop	Sandwich Place	Japanese Restaurant	Pizza Place	Sushi Restaurant	Restaurant	Italian Restaurant	Café	Middle Eastern Restaurant	Discount Store
10	Downtown Toronto	University of Toronto, Harbord	1	Coffee Shop	Café	Bar	Pub	Sandwich Place	Japanese Restaurant	Bakery	Italian Restaurant	Beer Store	Beer Bar
14	Downtown Toronto	St. James Town, Cabbagetown	1	Coffee Shop	Restaurant	Pizza Place	Café	Bakery	Italian Restaurant	Pub	Diner	Sandwich Place	Plaza

	Borough	Neighborhood	Cluster Labels	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
7	Downtown Toronto	Harbourfront East, Union Station, Toronto Islands	2	Park	Harbor / Marina	Café	Music Venue	Donut Shop	Doner Restaurant	Distribution Center	Discount Store	Diner	Dessert Shop

	Borough	Neighborhood	Cluster Labels	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
5	Downtown Toronto	Christie	3	Grocery Store	Café	Park	Coffee Shop	Baby Store	Dessert Shop	Electronics Store	Donut Shop	Doner Restaurant	Distribution Center

	Borough	Neighborhood	Cluster Labels	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
1	Downtown Toronto	Garden District, Ryerson	4	Coffee Shop	Sandwich Place	Clothing Store	Café	Hotel	Cosmetics Shop	Pizza Place	Middle Eastern Restaurant	Bank	Japanese Restaurant
2	Downtown Toronto	St. James Town	4	Coffee Shop	Italian Restaurant	Café	Cocktail Bar	Restaurant	Clothing Store	Diner	Bakery	Gastropub	Seafood Restaurant
3	Downtown Toronto	Berczy Park	4	Sandwich Place	Hotel	Coffee Shop	Cocktail Bar	Japanese Restaurant	Beer Bar	Café	Bakery	Italian Restaurant	Bank
6	Downtown Toronto	Richmond, Adelaide, King	4	Coffee Shop	Café	Sandwich Place	Hotel	Restaurant	Gym	Asian Restaurant	Sushi Restaurant	Bank	Deli / Bodega
8	Downtown Toronto	Toronto Dominion Centre, Design Exchange	4	Coffee Shop	Café	Hotel	Sandwich Place	Asian Restaurant	Gym	Pharmacy	Restaurant	Salad Place	Japanese Restaurant
9	Downtown Toronto	Commerce Court, Victoria Hotel	4	Coffee Shop	Café	Sandwich Place	Hotel	Bank	Restaurant	Japanese Restaurant	Asian Restaurant	Gym	Sushi Restaurant
11	Downtown Toronto	Kensington Market, Chinatown, Grange Park	4	Café	Vegetarian / Vegan Restaurant	Burger Joint	Mexican Restaurant	Gaming Cafe	Coffee Shop	Bakery	Art Gallery	Arts & Crafts Store	Park
12	Downtown Toronto	CN Tower, King and Spadina, Railway Lands, Har...	4	Coffee Shop	Italian Restaurant	Wings Joint	Park	Restaurant	Sandwich Place	Speakeasy	Gym / Fitness Center	Pub	French Restaurant
15	Downtown Toronto	First Canadian Place, Underground city	4	Coffee Shop	Café	Sandwich Place	Hotel	Bank	Restaurant	Japanese Restaurant	Asian Restaurant	Gym	Sushi Restaurant
16	Downtown Toronto	Church and Wellesley	4	Sushi Restaurant	Japanese Restaurant	Gay Bar	Restaurant	Burrito Place	Fast Food Restaurant	Indian Restaurant	Mediterranean Restaurant	Dance Studio	Coffee Shop