The Battle of Neighborhoods Finding a Better Place in Scarborough, Toronto

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Introduction

- Scarborough is a popular destination for new immigrants in Canada to reside.

- It is one of the most diverse and multicultural areas in the Greater Toronto Area, being home to various religious groups and places of worship.

- It includes a number of natural landmarks, including the Toronto Zoo, Rouge Park and the Scarborough Bluffs

Business problem

- Sorted list of the house in terms of housing prices in an ascending or descending order

- Sorted list of schools in terms of location, fees, rating, and reviews

Data

- Neighbourhoods of Scarborough, Toronto:- Neighbourhoods of Scarborough Wikipedia page through data scraping.

- Geographical coordinates of neighbourhoods:- Using GeoPy Library

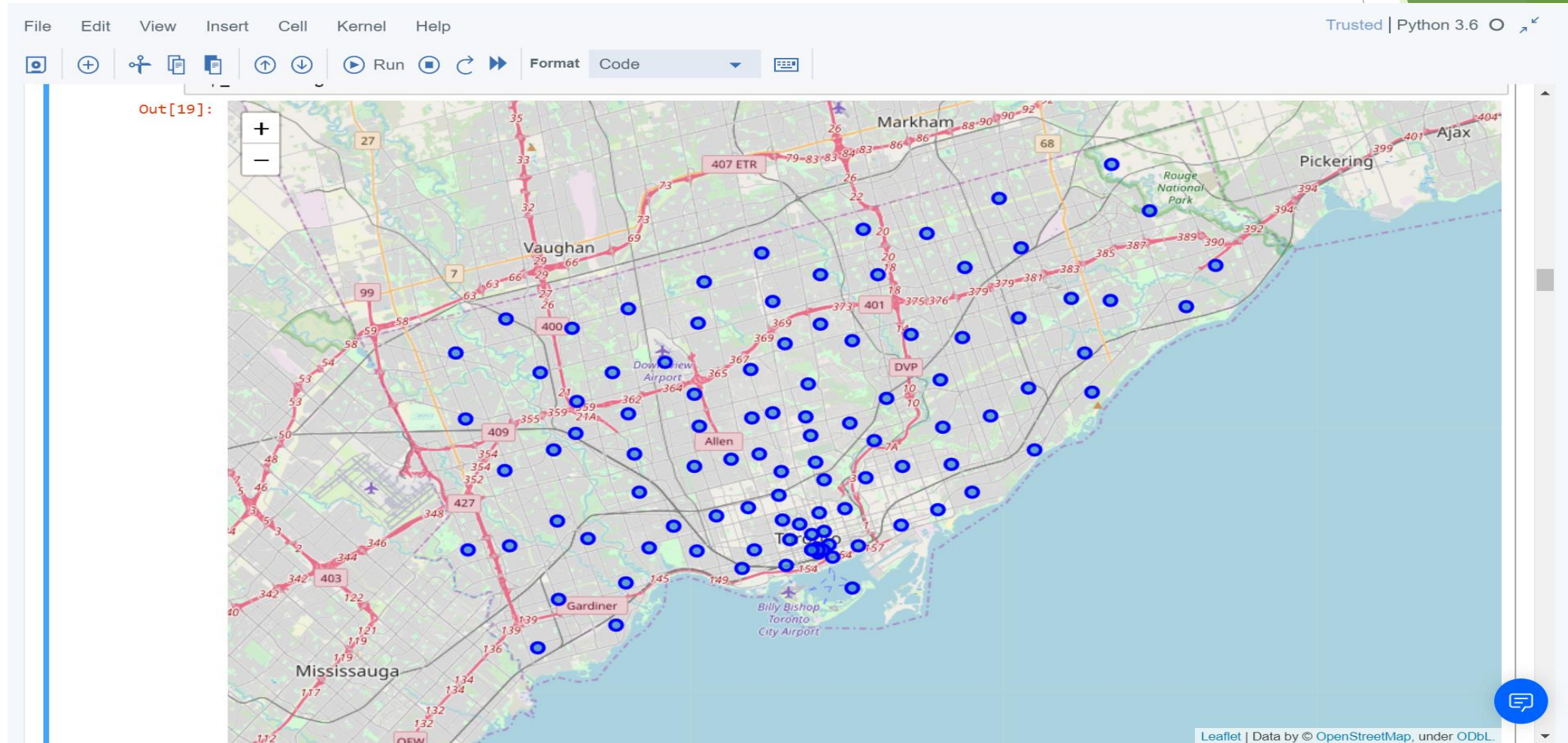- Venue data from Four Square:- using Four Square API

Methodology

▶ *Clustering Approach: Using k-Means Clustering*

▶ *Most Common Venue*

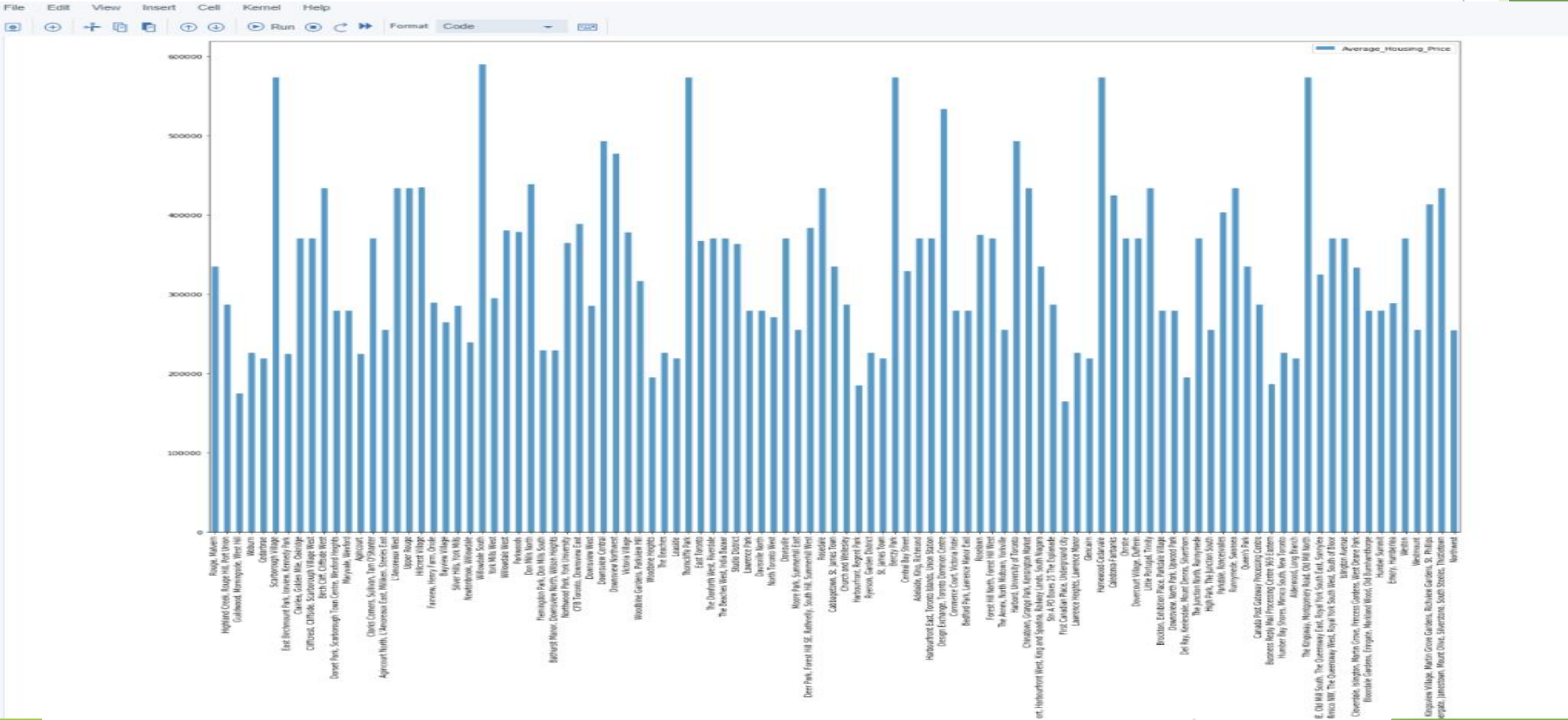| orough	Neighborhood	Latitude	Longitude	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
orough	Rouge, Malvern	43.811525	-79.195517	0	Zoo Exhibit	Financial or Legal Service	Fast Food Restaurant	Construction & Landscaping	Fish & Chips Shop	Filipino Restaurant	Field	Fish Market	Farmers Market	Doner Restaurant
orough	Highland Creek, Rouge Hill, Port Union	43.785665	-79.158725	0	Bar	Falafel Restaurant	Donut Shop	Dumpling Restaurant	Eastern European Restaurant	Electronics Store	Elementary School	Ethiopian Restaurant	Event Space	Yoga Studio
orough	Guildwood, Morningside, West Hill	43.765815	-79.175193	2	Park	Gym / Fitness Center	Pool	Fried Chicken Joint	Indian Restaurant	Athletics & Sports	Ethiopian Restaurant	Donut Shop	Dumpling Restaurant	Eastern European Restaurant
orough	Woburn	43.768369	-79.217590	0	Coffee Shop	Fast Food Restaurant	Business Service	Park	Yoga Studio	Dumpling Restaurant	Eastern European Restaurant	Electronics Store	Elementary School	Ethiopian Restaurant
orough	Cedarbrae	43.769688	-79.239440	0	Flower Shop	Athletics & Sports	Thai Restaurant	Bank	Bakery	Caribbean Restaurant	Hakka Restaurant	Indian Restaurant	Eastern European Restaurant	Electronics Store

Most Common venues near Neighborhood

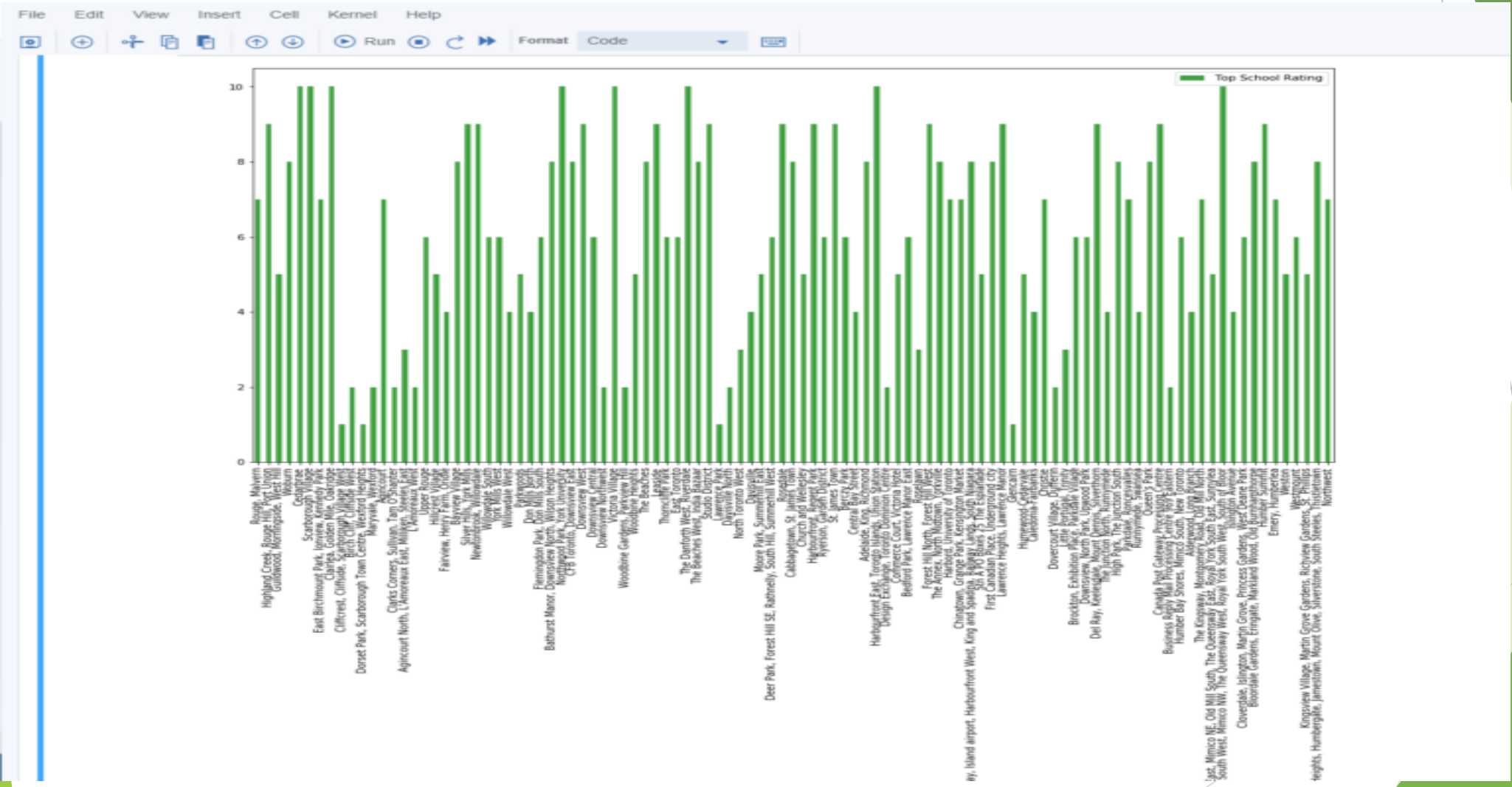|	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Adelaide, King, Richmond	Coffee Shop	Café	Hotel	Gastropub	Burger Joint	Asian Restaurant	Bar	Restaurant	American Restaurant	Steakhouse
1	Agincourt	Chinese Restaurant	Shopping Mall	Pizza Place	Supermarket	Sushi Restaurant	Breakfast Spot	Print Shop	Mediterranean Restaurant	Coffee Shop	Pool
2	Agincourt North, L'Amoreaux East, Milliken, St...	Pharmacy	Sandwich Place	Sushi Restaurant	Doner Restaurant	Donut Shop	Dumpling Restaurant	Eastern European Restaurant	Electronics Store	Elementary School	Ethiopian Restaurant
3	Albion Gardens, Beaumond Heights, Humbergate, ...	Grocery Store	Park	Sandwich Place	Discount Store	Japanese Restaurant	Fried Chicken Joint	Beer Store	Hardware Store	Pizza Place	Fast Food Restaurant
4	Alderwood, Long Branch	Convenience Store	Pub	Sandwich Place	Coffee Shop	Gas Station	Dance Studio	Gym	Pharmacy	Pizza Place	Falafel Restaurant

Plotting -Folium

2) **Average Housing Price by Clusters in Scarborough**

3) School Ratings by Clusters in Scarborough

Discussion

- Problem Which Tried to Solve:

- The major purpose of this project, is to suggest a better neighbourhood in a new city for the person who are shifting there. Social presence in society in terms of like minded people. Connectivity to the airport, bus stand, city centre, markets and other daily needs things nearby.

- Sorted list of house in terms of housing prices in a ascending or descending order

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Conclusion

- Data Analysis and machine learning techniques used in this project can be very helpful in determining solutions of certain business problems.

- Python's inbuilt libraries such as GeoPy, Folium and BeautifulSoup make it very easy and effective to analyse a geographical location.

- In this project ,we studied the neighbourhoods of Scarborough ,Toronto based on average house prices and school ratings.

The End

Thank you!