FIND THE BEST SPOT TO CAFE

IBM Data Science_Capstone Project   By Venus Wong

A. INTRODUCTION

- Nowadays, almost everyone loves coffee. Even though you don't like coffee, a café is always a perfect place to hang out with friends or have some relax time.

- This research is aimed to help visitors to find a best spot to explore perfect cafe in Toronto. To find a successful lifestyle cafe in the neighborhood, we will try to identify locations that have the most cafes in nearby.

Toronto

Location within Ontario

B. DATA

- In order to establish the targeted neighborhood(s), we will explore the demographics of the neighborhoods in the city of Toronto by segmenting the data and conducting descriptive analysis using Panda. Additional data will be gleaned by web scraping and API will be used to generate data.
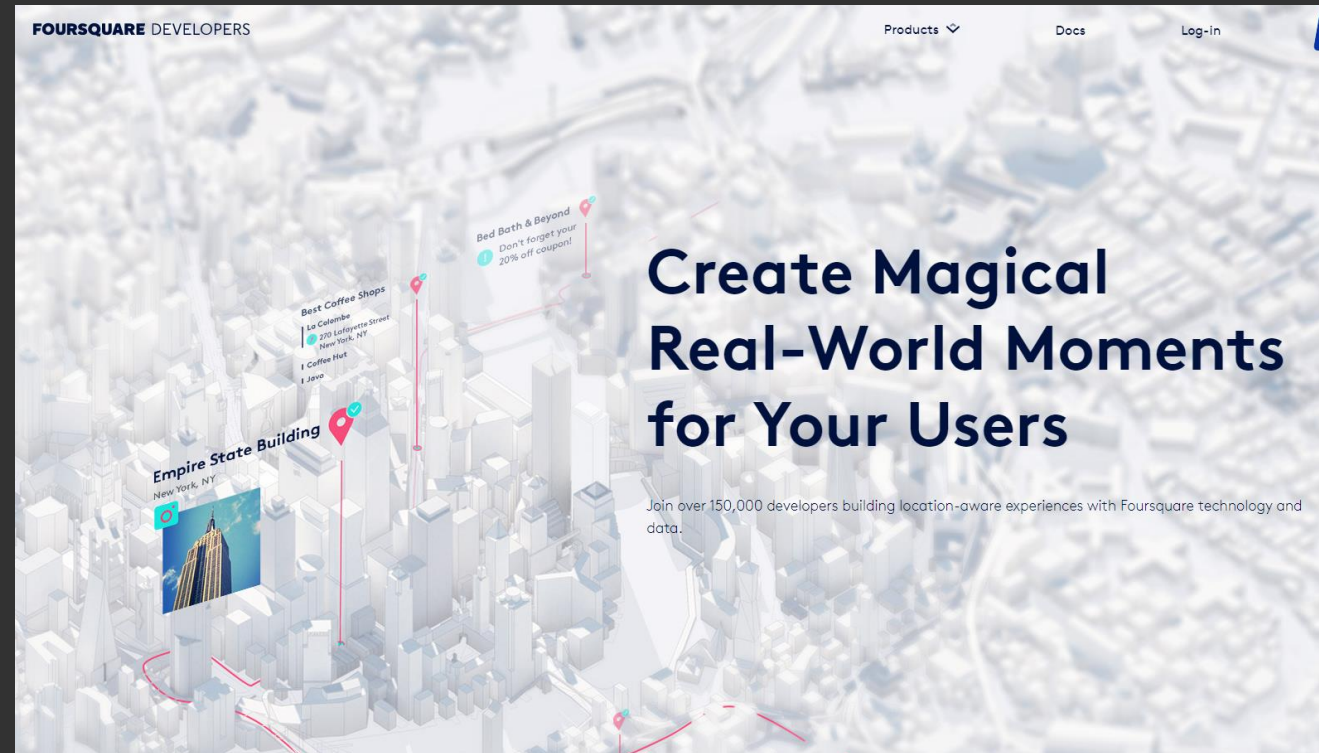
```
print(toronto_venues.shape)
toronto_venues.head()
```

(2210, 7)

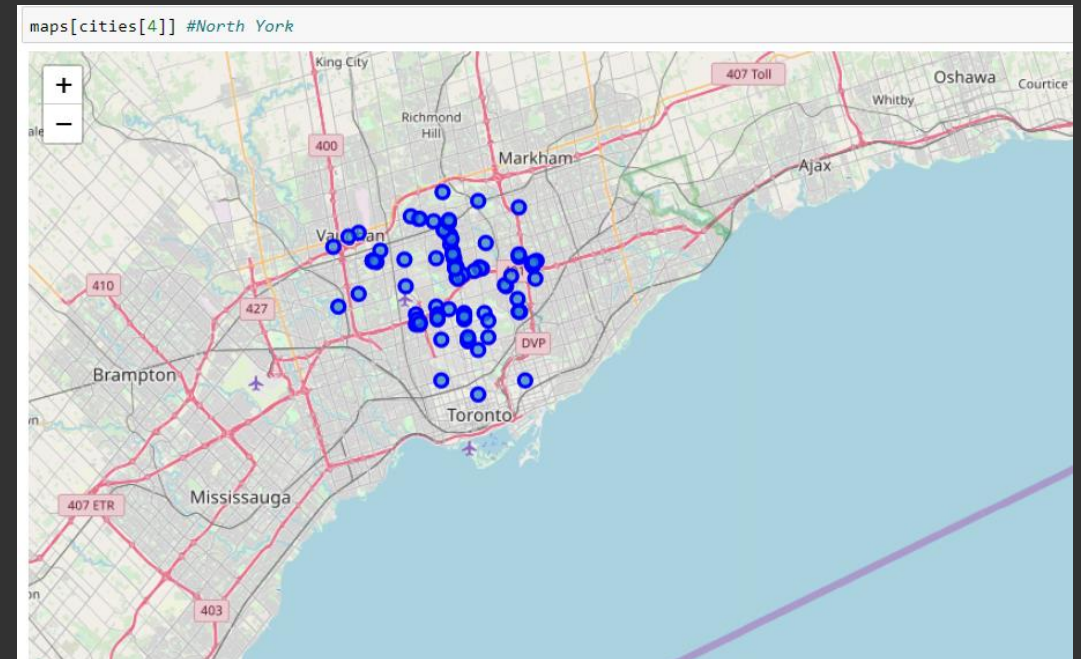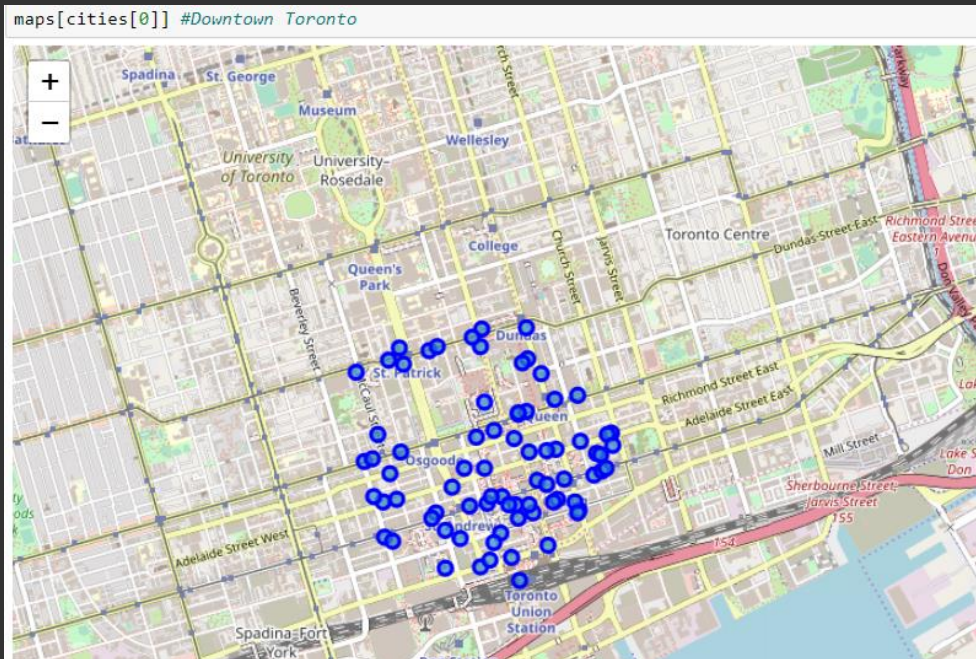|	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Rouge, Malvern	43.806686	-79.194353	Wendy's	43.807448	-79.199056	Fast Food Restaurant
1	Highland Creek, Rouge Hill, Port Union	43.784535	-79.160497	RIGHT WAY TO GOLF	43.785177	-79.161108	Golf Course
2	Highland Creek, Rouge Hill, Port Union	43.784535	-79.160497	Royal Canadian Legion	43.782533	-79.163085	Bar
3	Guildwood, Morningside, West Hill	43.763573	-79.188711	Swiss Chalet Rotisserie & Grill	43.767697	-79.189914	Pizza Place
4	Guildwood, Morningside, West Hill	43.763573	-79.188711	G & G Electronics	43.765309	-79.191537	Electronics Store

C. METHODOLOGY

- The methodology of this research is to evaluate the density of café in every city in Toronto. The major tool to explore the venues information will be the Foursquare API. We will use a specific category ID to search the Café venue in each city, the ID could be found on the FourSquare Website.

- Using the foursquare, we can the total number of the café in each city in Toronto. And we will explore the café density with a concrete measure.
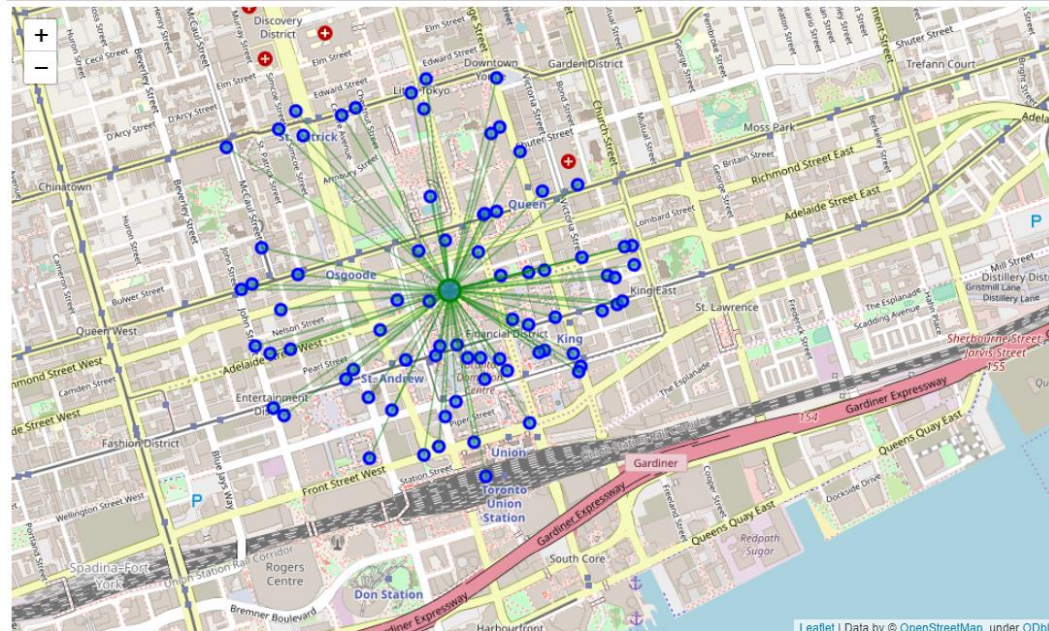
D.RESULT

- After exploring the total number of café in Toronto, the result is shown that downtown Toronto and North York has the most cafe in town. Total Number of Café in Downton Toronto is 111 while in North York is 103
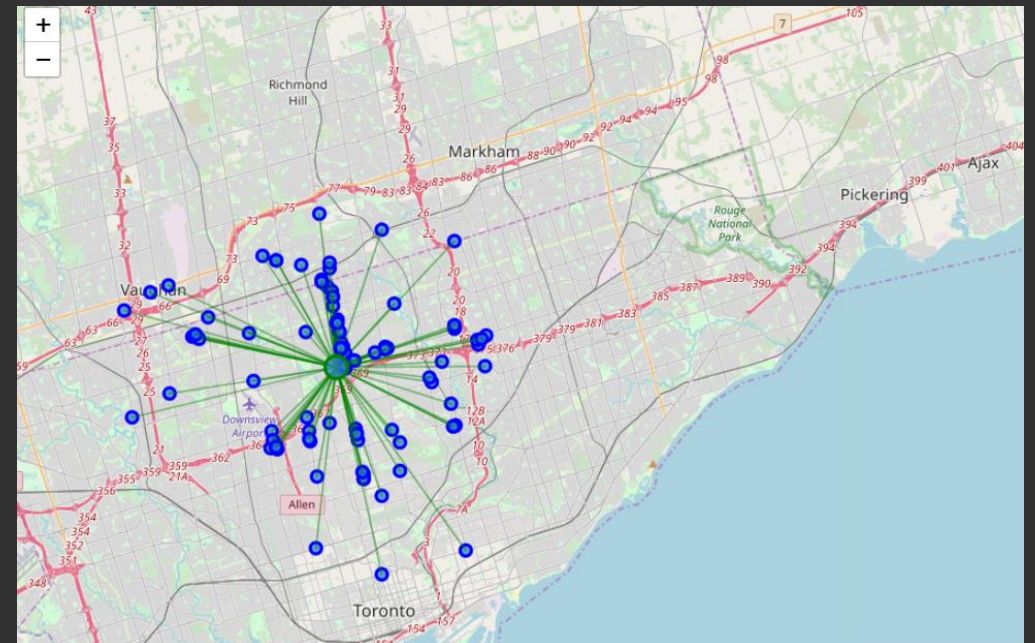

`maps[cities[0]] #Downtown Toronto`

`maps[cities[4]] #North York`

D. RESULT

- .After the exploration of total amount, we will have a concrete measure of the café density in the city. This research will use some basic statistics to measure the density.

Downtown Toronto

North York

CONCLUSION

- We now see that Downtown Toronto is his best option. Our tourist's best interest would be to book a hotel near that mean coordinate to surround himself with the 111 cafe there!!