THE BATTLE OF NEIGHBORHOODS

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BUSINESS PROBLEM

I want to help my friend to find the best neighborhood in Toronto which is like his current place of residence with amenities like shopping malls, parks and food courts. The challenge is to find a suitable neighborhood which is close enough meeting his specific requirements.

DATA

A list of neighborhoods in New York and Toronto is downloaded and their respective location. The data is extracted from the below sources

New York neighborhoods: https://ibm.box.com/shared/static/fbpwbovar7lf8p5sgddm06cgipa2rxpe.json

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

Transform the data into Pandas dataframe, use Geopy Python package to get the latitude and the longitude of all the neighborhoods of Toronto, use Folium Python library to map the neighborhoods, use Foursquare API to get information about venues around the neighborhoods. Look for a group of venues in walking distance of each neighborhood like shopping malls, parks and food courts.

METHODOLOGY

❖ Web scrapping for neighborhood list

❖ Obtain latitute and longitude coordinates using geocoder

❖ Use Foursquare API

❖ Group data by neighborhood

❖ Perform clustering using K-Means clusterinng#
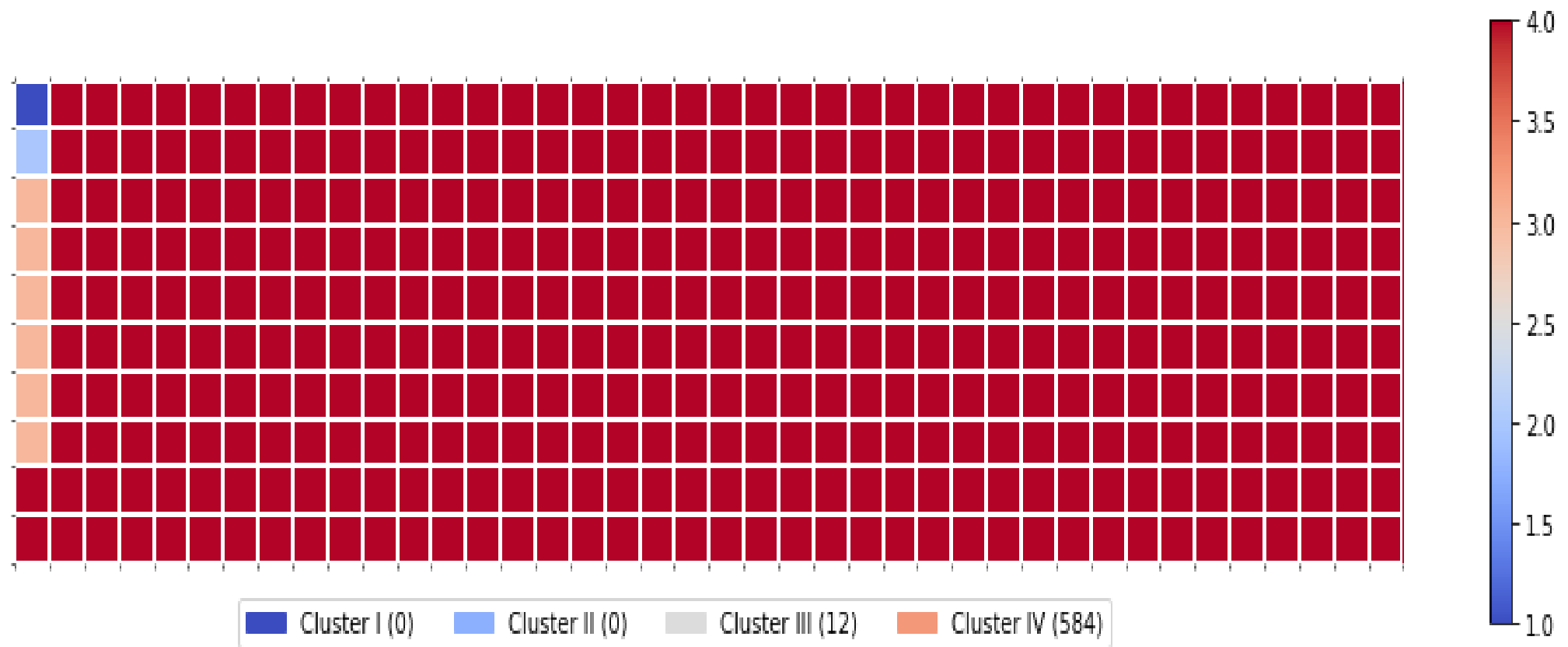
❖ Visualize the clusters using Folium

DATA SEGMENTED

Cluster I (0)   Cluster II (0)   Cluster III (12)   Cluster IV (584)

CONCLUSION

I: Neighborhoods that have around parks, bus station and Restaurant places.

II: Neighborhoods that have around shopping mall, bus station and convenience store

III: Neighborhoods that have around Plaza, hotels, bar and stores

IV: Neighborhood that has nothing as per requirement

My friend can now decide and move from Brooklyn, New York to Toronto, Canada using this system to get an idea about what is the best suitable place for him.