



# *Capstone Project*

DATA SECTION

Author: Heta Patel

## Data Section:

The following sources of the data are used in the Project.

\* Data Title: List of postal codes in Canada: M

\* Type of Data: HTML

### Description of the dataset:

This is a list of postal codes in Canada where the first letter is M. Postal codes beginning with M are located within the city of Toronto in the province of Ontario. Only the first three characters are listed, corresponding to the Forward Sortation Area.

A python script was developed to harness the data and use it in the project.

\*SOURCE:

[https://en.wikipedia.org/wiki/List\\_of\\_postal\\_codes\\_of\\_Canada:\\_M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)



The screenshot shows the Wikipedia page for 'List of postal codes of Canada: M'. The page includes a sidebar with navigation links, a main content area with a table of postal codes, and a note about rural FSAs in Toronto.

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## List of postal codes of Canada: M

From Wikipedia, the free encyclopedia

This is a list of [postal codes in Canada](#) where the first letter is M. Postal codes beginning with M are located within corresponding to the Forward Sortation Area.

Canada Post provides a free postal code look-up tool on its website,<sup>[1]</sup> via its [applications](#) for such smartphones and also sell validation tools, which allow customers to properly match addresses and postal codes. Hard-copy directo

### Toronto - FSAs [ edit ]

Note: There are no rural FSAs in Toronto, hence no postal codes start with M0.

Postcode ↕	Borough ↕	Neighbourhood ↕
M1A	Not assigned	Not assigned
M2A	Not assigned	Not assigned
M3A	<a href="#">North York</a>	<a href="#">Parkwoods</a>
M4A	<a href="#">North York</a>	<a href="#">Victoria Village</a>

Author: Heta Patel

\* Data Title: Toronto Neighbourhood coordinates

\* Type of Data: CSV

Description of the dataset:

The dataset contains the coordinates of the neighbourhood in Toronto which is used to make the API calls to Foursquare.

\*SOURCE:

[http://cocl.us/Geospatial\\_data](http://cocl.us/Geospatial_data)

```
In [11]: # Load the coordinates from the csv file on Coursera
coordinates = pd.read_csv("http://cocl.us/Geospatial_data")
coordinates.head()
```

Out[11]:

	Postal Code	Latitude	Longitude
0	M1B	43.806886	-79.194353
1	M1C	43.784535	-79.160497
2	M1E	43.763573	-79.188711
3	M1G	43.770992	-79.216917
4	M1H	43.773136	-79.239476

\* Data Title: Foursquare's Location Data

\* Type of Data: JSON

Description of the dataset:

Foursquare provides the details about a particular location including the places one can explore, venues, tips and photos.

We have used Foursquare's API to get the venues and their category available in a particular neighbourhood.

\*SOURCE:

<http://foursquare.com/>

Getting the venues

```
In [35]: toronto_venues = getNearbyVenues(names=df['Neighbourhood'],
                                         latitudes=df['Latitude'],
                                         longitudes=df['Longitude'])

In [38]: print(toronto_venues.shape)
toronto_venues.head()
```

(2235, 7)

Out[38]:

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Rouge, Malvern	43.806886	-79.194353	Wendy's	43.807448	-79.199056	Fast Food Restaurant
1	Highland Creek, Rouge Hill, Port Union	43.784535	-79.160497	Royal Canadian Legion	43.782533	-79.163085	Bar
2	Guildwood, Morningside, West Hill	43.763573	-79.188711	Swiss Chalet Rotisserie & Grill	43.767897	-79.189914	Pizza Place
3	Guildwood, Morningside, West Hill	43.763573	-79.188711	G & G Electronics	43.765309	-79.191537	Electronics Store
4	Guildwood, Morningside, West Hill	43.763573	-79.188711	Marina Spa	43.766000	-79.191000	Spa

Using Foursquare's API