Peer-graded Assignment
Capstone Project - The Battle of Neighbourhoods
(Week 1)

The city analysed in this project is the City of New York. The following data set is used for the analysis of the same.

Data 1

New York City is split up into five boroughs: the Bronx, Brooklyn, Manhattan, Queens, and Staten Island. A **borough** is a town that has its own government. The term *borough* was adopted to describe a unique form of governmental administration for each of the five fundamental constituent parts of the newly city. The **neighbourhoods in New York City** are located within the five boroughs of the City of New York.

In order to segment the neighbourhoods and explore them, we will essentially need a dataset that contains the 5 boroughs and the neighbourhoods that exist in each borough as well as the latitude and longitude coordinates of each neighbourhood.

This dataset exists for free on the web in the following link.

https://geo.nyu.edu/catalog/nyu_2451_34572

Data 2

Second data set which will be used is the DOHMH Farmers Markets and Food Boxes dataset. Below are the links for both.

https://data.cityofnewyork.us/dataset/DOHMH-Farmers-Markets-and-Food-Boxes/8vwk-6iz2

https://www.grownyc.org/greenmarketco/foodbox

GrowNYC's Fresh *Food Box* Program is a food access initiative that enables under-served communities to purchase fresh, healthy, and primarily regionally grown produce well below traditional retail prices.

A *farmers' market* is often defined as a public site used by two or more local or regional producers for the direct sale of farm products to consumers. In addition to fresh fruits and vegetables, markets may sell dairy products, fish, meat, baked goods, and other minimally processed foods.

Data 3

For the below analysis we will get data from wikipedia as given below :
1. New York Population
2. New York City Demographics
3. Cuisine of New York city

https://en.wikipedia.org/wiki/New_York_City

https://en.wikipedia.org/wiki/Economy_of_New_York_City

https://en.wikipedia.org/wiki/Portal:New_York_City

https://en.wikipedia.org/wiki/Cuisine_of_New_York_City

https://en.wikipedia.org/wiki/List_of_Michelin_starred_restaurants_in_New_York_City

Data 4

New York city geographical coordinate's data will be utilized as input for the Foursquare API, that will be leveraged to provision venues information for each neighbourhood. We will use the Foursquare API to explore neighbourhoods in New York City.
The below is image of the Foursquare API data.

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Wakefield	40.894705	-73.847201	Lollipops Gelato	40.894123	-73.845892	Dessert Shop
1	Wakefield	40.894705	-73.847201	Rite Aid	40.896521	-73.844680	Pharmacy
2	Wakefield	40.894705	-73.847201	Cooler Runnings Jamaican Restaurant Inc	40.898283	-73.850478	Caribbean Restaurant
3	Wakefield	40.894705	-73.847201	Carvel Ice Cream	40.890487	-73.848568	Ice Cream Shop
4	Wakefield	40.894705	-73.847201	Dunkin Donuts	40.890631	-73.849027	Donut Shop