## Capstone Project - The Battle of Neighbourhoods Aditya Maheshwari

## Data

For this project we need the following data:

- New York City data that contains list Boroughs, Neighbourhoods along with their latitude and longitude.
  - Data source : https://cocl.us/new\_york\_dataset
  - Description: This data set contains the required information. And we will
    use this data set to explore various neighbourhoods of New York city.
- Indian restaurants in each neighbourhood of new york city.
  - Data source : Foursquare API
  - Description: By using this api we will get all the venues in each neighbourhood. We can filter these venues to get only Indian restaurants.
- GeoSpace data
  - Data source : https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm
  - Description: By using this geo space data we will get the New York Borough boundaries that will help us visualize choropleth map.

## **Approach**

- Collect the New York city data from <a href="https://cocl.us/new\_york\_dataset">https://cocl.us/new\_york\_dataset</a>
- Using FourSquare API we will find all venues for each neighbourhood.
- Filter out all venues that are Indian Restaurants.
- Find rating, tips and like count for each Indian Restaurants using FourSquare API.
- Using rating for each restaurant, we will sort that data.
- Visualize the Ranking of neighbourhoods using folium library(python)

We will import the required libraries for python.

- pandas and numpy for handling data.
- request module for using FourSquare API.
- geopy to get co-ordinates of City of New York.
- folium to visualize the results on a map