## Problem

The Client asked us to find 5 best neighborhoods in New York to open a new Coffee Shop.

## Data:

The data required is the location of the coffee shops in each neighborhood. To gather the information we used the neighborhoods information from the JSON file provided.

## Process:

Along with the JSON file, we used four squares to find how many coffee shops are there. Then we filtered the neighborhoods with more no. of Coffee shops, and got a list of neighborhood with only one coffee shop available. We then also filters out the neighborhood with Starbucks, since that tends to attract more customers. And, we got the list of neighborhoods where out client can potentially open the coffee shop as:

|    | Borough       | Neighborhood    | Latitude  | Longitude  | Cluster Labels |
|----|---------------|-----------------|-----------|------------|----------------|
| 0  | Bronx         | Kingsbridge     | 40.881687 | -73.902818 | 3              |
| 8  | Brooklyn      | Bensonhurst     | 40.611009 | -73.995180 | 4              |
| 16 | Manhattan     | Inwood          | 40.867684 | -73.921210 | 1              |
| 18 | Queens        | Woodside        | 40.746349 | -73.901842 | 2              |
| 20 | Staten Island | New Springville | 40.594252 | -74.164960 | 0              |

The k means algorithm will be applied to get the clusters of the neighborhoods. And visualized in FourSquares map as:

