Open an Italian Restaurant in Manhattan

Introduction/Business Problem

Manhattan is the most densely populated of the five boroughs of New York City. Manhattan serves as the city's economic and administrative center. The borough consists mostly of Manhattan Island, bounded by the Hudson, East, and Harlem rivers; as well as several small adjacent islands. Manhattan has been described as the cultural, financial, media, and entertainment capital of the world and thousands of people work in the offices of Manhattan every day.

The Italian cousin is one of the most appreciate cousin in the world. This is due to its tasty and simplicity but also to the quality of the ingredients and to the great variety of dishes.

In this project we will analyze which is the best neighborhood of Manhattan where to open an Italian restaurant. The project is addressed to business people that want to exploit the great amount of people in Manhattan that will for sure be attracted from the Italian cousin.

To select the best neighborhood, we will extract the number of Italian Restaurant in each neighborhood of Manhattan in order to select the neighborhood with few Italian Restaurant already present. Moreover, we will choose the most "central" neighborhood that in this way will be easy to reach from every point of Manhattan.

Data

I will use the New York City dataset that contains Borough, Neighborhoods, Latitudes and Longitudes information. Data were downloaded trough a .csv file from https://data.cityofnewyork.us From this dataset the neighborhood of Manhattan will be extracted.
With the Foursquare API I will get all the venues in Manhattan neighborhood. I will then filter these venues to get only Italian restaurants. With the Italian restaurant dataset I will analyze the best value of k to perform a clustering analysis to extract the cluster of neighborhood with less Italian restaurant. At the end, from this neighborhood I will select the one closest to the center of Manhattan.