For the last few months, I have been working on earning the IBM Data Science professional certificate. To complete this course, we are asked to submit a capstone project which we propose a solution to a business case. In this project, we will explain all the processing steps beginning from the problem, data preparation, Methodology, and finally the analysis.

1. Introduction

1.1. Background

Toronto, Ontario, was defined as a city in 1834, with a population of 6,197,000 (2020). Toronto is Ontario's capital city, Canada's largest city hall, and ranked as the fourth largest city in North America. It includes the former cities of Toronto, York, Scarborough and Etobicoke, York, and East York. The city accommodates a huge number of the immigrants' population, also it's a national and international hub for communications, cultural lives, and businesses. According to the 2016 census, English and French are the mother tongues of 56.0% and 21.4% of Canadians respectively.

1.2. Business Problem

In this example, I will try to guide an investor with his idea of opening an Italian restaurant in Canada such as where to open it? which neighborhood has the most income and interest?

This report aims to analyze the neighborhoods of Toronto city from different data sets, and find the perfect spot to open an Italian Restaurant with using data like:

1- High Average Total income (Neighborhood Profile Toronto)
2- Income Distribution of Each Neighborhood (Toronto Census)
3- Number of restaurants in Each Neighborhood (Foursquare API)
4- Number of Italian restaurants in Each Neighborhood (Foursquare API)
5- Immigration data of Canada (Immigration Canada)

1.3. Target Audience

This project target peoples who are interested in:

1. Starting a new personal business by opening a restaurant in Toronto. This report will help any investor to make the right decision regarding opening a restaurant in Canada.
2. Italian residents of Canada who would like to enjoy food from their own country.