## 2. Data Acquisition and Cleaning

## 2.1 Data Acquisition

The data acquired for this project is a combination of data from three sources. The first data source of the project uses a OPEN DATA ISP that shows the crime per Citys in Rio de Janeiro/BR. The dataset contains many itens but we wil use the following columns:

- fmun\_cod: location of cities.
- fmun: name for city borough.
- year that crime occour 2014 2019
- ●roubo\_comercio trade theft
- Roubo\_carga Cargo theft

The second source of data is scraped from a wikipedia page that contains the list of Cities in boroughs. This page contains additional information about the boroughs, the following are the columns:

- Borough: The names of the 21 Rio de Janeiro boroughs.
- Population: Quantiti of cityzens.
- Territorial area. Meter square of cities
- **Densiti**: The political party that control the borough.
- **Population (2013 est)[1]**: The population in the borough recorded during the year 2013.

**The third** data source is the <a href="http://astro.if.ufrgs.br/br.htm">http://astro.if.ufrgs.br/br.htm</a> . This data set contain: Latitude – Longitude – Nome