Data

Because the city of Bogotá is divided into 20 localities, the first set of data relates the number, name, zip code, area, population and population density of each of the localities. This information will be extracted from Wikipedia, which can be seen in the following link: https://es.wikipedia.org/wiki/Anexo:Localidades_de_Bogot%C3%A1.

Now to have information on each of the supermarkets, both their own and those of the competitors, it will be necessary to use the Foursquare API. The most relevant information to extract for this problem is the number of supermarkets in each of the networks, which will be obtained through calls to the API with their respective parameters.

When all the information is extracted, it will be organized in DataFrames, with which a Clustering model will be proposed. The objective of the model will be to cluster the localities of the city of Bogotá in clusters depending on the number of supermarkets identified by each of the networks ("D1", "ARA", "OXXO" and "ÉXITO"). Subsequently, an analysis of each of the clusters obtained will be carried out in order to suggest to the company's management "ÉXITO" in which localities the new supermarkets should be placed.

Note: in this project the name of real companies is taken, information about the location of their supermarkets, simply for educational purposes. Similarly, the situation described is not real and only seeks to represent a case study in the field of data science.