**Data**

In this report, I am going to use the explore function in the Foursquare API to get the most common venues in each neighborhood, which would allow us to compare the different neighborhoods and conclude with which is the most suitable for our purpose.

First of all, we need the coordinates for all the Bratislava’s boroughs and neighborhoods. They were extracted from Wikipedia and I created a CSV file with latitudes and longitudes. As they are in sexagesimal format, we have to recalculate them and convert those figures to decimal format.

Once we have the coordinates in the proper format, we can proceed to create a pandas dataframe which includes boroughs, neighborhoods and coordinates per neighborhood. After that we create a map. We can use geopy library to get the coordinates for Bratislava, which will be used as center for the map, in which we superimpose on top the neighborhoods’ coordinates.

Then, we will explore the venues in each neighborhood requesting these details from Foursquare and applying longitude, latitude and radius as search limits. We define a function that will iterate over the API request as many times as the number of venues in Bratislava.

We write the code to run the function above and create a new dataframe with all venues, venue categories, neighborhoods where they are located and their coordinates.

On this dataframe, we will check how many venues are there per neighborhood and category, calculating the frequency of each of them and ranking the categories by this frequency. These will allow us to compare the neighborhoods.

Finally, we will create neighborhood clusters through k-means, to find which are the most suitable neighborhoods to locate the new office, which must contain the broadest variety of restaurants, coffee shops and green zones.