Data

For this project I will use data provided by the government site "Datos CDMX" (https://datos.cdmx.gob.mx/pages/home/) to get the neighborhood Names and the location (Latitude and Longitude) of each of them. Once we download the data, the next step is to deal with the missing values, which first I try to find the information using Nominatim from geopy. The remain missing data will be drop.

Once we get the Latitude and Longitude for every Neighborhood the Foursquare request is going to be made and we will get information in JSON format (figure 1)


```
"venue": {
  "id": "49b6e8d2f964a52016531fe3",
  "name": "Russ & Daughters",
  "location": {
    "address": "179 E Houston St",
    "crossStreet": "btwn Allen & Orchard St",
    "lat": 40.72286707707289,
    "lng": -73.98829148466851,
    "labeledLatLngs": [
      {
        "label": "display",
        "lat": 40.72286707707289,
        "lng": -73.98829148466851
      }
    ],
    "distance": 130,
    "postalCode": "10002",
    "cc": "US",
    "city": "New York",
    "state": "NY",
    "country": "United States",
    "formattedAddress": [
      "179 E Houston St (btwn Allen & Orchard St)",
      "New York, NY 10002",
      "United States"
    ]
  },
  "categories": [
    {
      "id": "4bf58dd8d48988d1f5941735",
      "name": "Gourmet Shop",
      "pluralName": "Gourmet Shops",
      "shortName": "Gourmet",
      "icon": {
        "prefix": "https://ss3.4sqi.net/img/categories_v2/shops/food_gourmet_",
        "suffix": ".png"
      },
      "primary": true
```


Figure 1
Foursquare result in JSON format

The process of making requests will be perform for each Neighborhood. In order to work with the information it will be save in a data frame.