DATA REQUIREMENT

The initial data required would be getting the latitude and longitudes of the neighbourhoods in the city of Chennai and this would be accomplished by **webscraping** https://chennaiiq.com/chennai/latitude_longitude_areas.asp and getting only the table.

Then, we modify the data and use the modified latitude and longitudes to make API calls. The foursquare website contains information regarding different venues in different locations. API calls are made mentioning client details and the location details in terms of latitude and longitude. The data that is returned is in the form of a nested dictionary with the data that we requested. By making a loop that extracts the desired portion, we can get specific venues for each neighbourhood into a dataframe.

Following this, the obtained data is clustered using kmeans clustering to separate neighbourhoods based on patterns in restaurant distribution. The final clustered dataframe can be used to derive conclusions based on which the stakeholders can make informed decisions regarding their business venture.