DATA:

To get the list of London Boroughs, I have used the Wikipedia page https://en.wikipedia.org/wiki/List_of_areas_of_London and scraped the data from this page using BeautifulSoup library of python. After cleaning the tabular data from wikipedia, it looked like the following:

	Neighborhood	London borough	Post town	Postcode district
0	Abbey Wood	Bexley, Greenwich	LONDON	SE2
1	Acton	Ealing, Hammersmith and Fulham	LONDON	W3, W4
2	Addington	Croydon	CROYDON	CR0
3	Addiscombe	Croydon	CROYDON	CR0
4	Albany Park	Bexley	BEXLEY, SIDCUP	DA5, DA14
5	Aldborough Hatch	Redbridge	ILFORD	IG2
6	Aldgate	City	LONDON	EC3

To use this data with Foursquare API, Longitude and Latitude columns were added and populated using NOMINATIM, post which data looked like:

	Neighborhood	London borough	Post town	Postcode district	Neighborhood Latitude	Neighborhood Longitude
0	Abbey Wood	Bexley, Greenwich	LONDON	SE2	51.4876	0.11405
1	Acton	Ealing, Hammersmith and Fulham	LONDON	W3, W4	51.5081	-0.273261
2	Addington	Croydon	CROYDON	CR0	51.3586	-0.0316347
3	Addiscombe	Croydon	CROYDON	CR0	51.3797	-0.0742821
4	Albany Park	Bexley	BEXLEY, SIDCUP	DA5, DA14	51.4354	0.125965
5	Aldborough Hatch	Redbridge	ILFORD	IG2	51.5855	0.0988

Thereafter, information regarding venues nearby the Neighborhood of above data was collected using FOURSQUARE API, the data recieved from it was further cleaned to look like:

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Abbey Wood	51.487621	0.114050	Co-op Food	51.487650	0.113490	Grocery Store
1	Abbey Wood	51.487621	0.114050	Bostal Gardens	51.486670	0.110462	Playground
2	Abbey Wood	51.487621	0.114050	Abbey Wood Caravan Club	51.485502	0.120014	Campground
3	Acton	51.508140	-0.273261	London Star Hotel	51.509624	-0.272456	Hotel
4	Acton	51.508140	-0.273261	Dragonfly Brewery at George & Dragon	51.507378	-0.271702	Brewery

The above data was used to cluster the neighborhoods as per the venue category in the neighborhoods. This clustered data was further used to compare the features of different London Boroughs.

Data regarding the profiles of London Boroughs was obtained from the link https://old.datahub.io/dataset/london-borough-profiles . It is the official data provided by the government authorities of the United Kingdom.

	Code	Area_name	Inner/_Outer_London	GLA_Population_Estimate_2017	GLA_Household_Estimate_2017	Inland_Area_(Hectares)	Population_density_(per_hectare)_2017	Average_Age,_201
0	E09000001	City of London	Inner London	8800	5326	290	30.3	43
1	E09000002	Barking and Dagenham	Outer London	209000	78188	3,611	57.9	32
2	E09000003	Barnet	Outer London	389600	151423	8,675	44.9	37
3	E09000004	Bexley	Outer London	244300	97736	6,058	40.3	39
4	E09000005	Brent	Outer London	332100	121048	4,323	76.8	35

The data was visualized using heatmap for various parameters, and along with the neighborhood data, this data was used to get knowledge about various London boroughs based on different features mentioned in the data like population, number of households, employment etc.