DATA

CAPSTONE PROJECT – THE BATTLE OF NEIGHBORHOODS

DATA

- Based on definition of our problem, factors that will influence our decision are:

- The total number of crimes commited in each of the borough during the last year.

- The most common venues in each of the neighborhood in the safest borough selected.

- Following data sources will be needed to extract/generate the required information:

- **Part 1**: Preprocessing a real world data set from Kaggle showing the London Crimes from 2008 to 2016: A dataset consisting of the crime statistics of each borough in London obtained from Kaggle

- **Part 2**: Scraping additional information of the different Boroughs in London from a Wikipedia page.: More information regarding the boroughs of London is scraped using the Beautifulsoup library

- **Part 3**: Creating a new dataset of the Neighborhoods of the safest borough in London and generating their co-ordinates.: Co-ordinate of neighborhood will be obtained using **Google Maps API geocoding**

PART 1

- **London Crime Data**

- About this file

- lsoa_code: code for Lower Super Output Area in Greater London.

- borough: Common name for London borough.

- major_category: High level categorization of crime

- minor_category: Low level categorization of crime within major category.

- value: monthly reported count of categorical crime in given borough

- year: Year of reported counts, 2008-2016

- month: Month of reported counts, 1-12

- Data set URL: https://www.kaggle.com/jboysen/london-crime

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PART 2

- **Scraping additional information of the different Boroughs in London from a Wikipedia page**

- **Using Beautiful soup to scrap the latitude and longitiude of the boroughs in London**

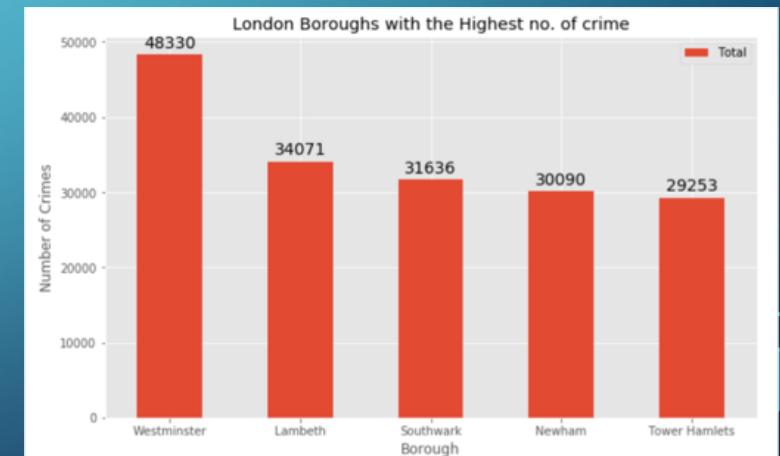- URL: https://en.wikipedia.org/wiki/List_of_London_boroughs

PART 3

- **Creating a new dataset of the Neighborhoods of the safest borough in London and generating their co-ordinates.**

- The list of Neighborhoods in the Royal Borough of Kingston upon Thames was found on a wikipedia page: https://en.wikipedia.org/wiki/List_of_districts_in_the_Royal_Borough_of_Kingston_upon_Thames

DESCRIPTIVE STATISTICS OF THE DATA

	Burglary	Criminal Damage	Drugs	Other Notifiable Offences	Robbery	Theft and Handling	Violence Against the Person	Total
count	33.000000	33.000000	33.000000	33.000000	33.000000	33.000000	33.000000	33.000000
mean	2069.242424	1941.545455	1179.212121	479.060606	682.666667	8913.121212	7041.848485	22306.696970
std	737.448644	625.207070	586.406416	223.298698	441.425366	4620.565054	2513.601551	8828.228749
min	2.000000	2.000000	10.000000	6.000000	4.000000	129.000000	25.000000	178.000000
25%	1531.000000	1650.000000	743.000000	378.000000	377.000000	5919.000000	5936.000000	16903.000000
50%	2071.000000	1989.000000	1063.000000	490.000000	599.000000	8925.000000	7409.000000	22730.000000
75%	2631.000000	2351.000000	1617.000000	551.000000	936.000000	10789.000000	8832.000000	27174.000000
max	3402.000000	3219.000000	2738.000000	1305.000000	1822.000000	27520.000000	10834.000000	48330.000000

TOTAL CRIMES

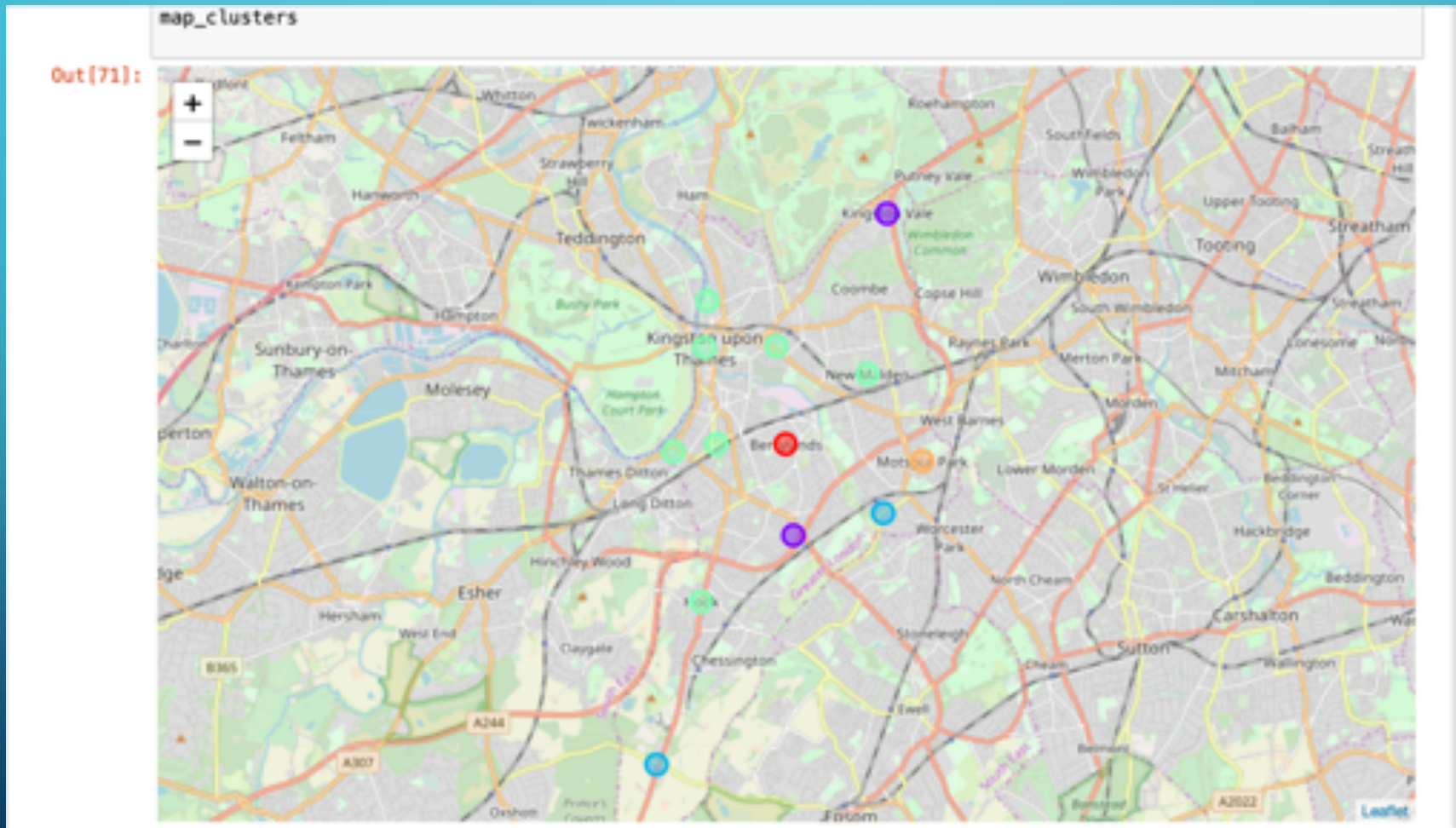|	Borough	Local authority	Political control	Headquarters	Area (sq mi)	Population (2013 est) [1]	Co-ordinates	Burglary	Criminal Damage	Drugs	Other Notifiable Offences	Robbery	Theft and Handling	Violence Against the Person	Total
32	Westminster	Westminster City Council	Conservative	Westminster City Hall, 64 Victoria Street	8.29	226841	51°29'50"N 0°08'14"W / 51.4973°N 0.1372°W /...	3218	2179	2049	708	1822	27520	10834	48330
21	Lambeth	Lambeth London Borough Council	Labour	Lambeth Town Hall, Brixton Hill	10.36	314242	51°27'39"N 0°06'59"W / 51.4607°N 0.1163°W /...	3087	2764	2738	635	1196	13155	10496	34071
27	Southwark	Southwark London Borough Council	Labour	160 Tooley Street	11.14	298464	51°30'13"N 0°04'49"W / 51.5035°N 0.0804°W /...	2946	2621	1838	494	1317	12946	9474	31636
24	Newham	Newham London Borough Council	Labour	Newham Dockside, 1000 Dockside Road	13.98	318227	51°30'28"N 0°02'49"E / 51.5077°N 0.0469°E /...	2115	2496	1684	713	1472	11964	9646	30090
29	Tower Hamlets	Tower Hamlets London Borough Council	Labour	Town Hall, Mulberry Place, 5 Clove Crescent	7.63	272890	51°30'36"N 0°00'21"W / 51.5099°N 0.0059°W /...	2794	2357	1629	678	1234	10953	9608	29253

PIVOT

Major_Category Borough	Burglary	Criminal Damage	Drugs	Other Notifiable Offences	Robbery	Theft and Handling	Violence Against the Person
Barking and Dagenham	1287	1949	919	378	534	5607	6067
Barnet	3402	2183	906	499	464	9731	7499
Bexley	1123	1673	646	294	209	4392	4503
Brent	2631	2280	2096	536	919	9026	9205
Bromley	2214	2202	728	417	369	7584	6650

GEOGRAPHIC DATA

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