

The programming language used to complete this assignment is Python language along with several libraries like Pandas, Asyncio, Numpy, Aiohttp among others. Asyncio is used to achieve better performance.

The logic is:

1) We hit the Crime API (<https://data.police.uk/docs/method/crime-street/>) and provide a custom area. The API returns a set of json data regarding crime occurrences along with the category of the crime, the outcome, the latitude and the longitude.

2) We iterate the results and for each result we hit the second API in order to locate the neighborhood and the force in that particular neighborhood (<https://data.police.uk/docs/method/neighbourhood-locate/>). We provide the latitude and longitude we received from the first call which depict the location of the crime.

3) We add the data into a default dictionary of lists from the collections module. When the loop is finished and we have the dictionary populated with the data we convert the dictionary to a Pandas dataframe.

4) We add a new flag column based on the outcome column. If the outcome column is null then we assign 1 else 0. This way we know which police stations do not provide outcome. We select the distinct police stations when the flag equals 1.

5) We drop the null values from the dataframe and we group by based on the crime column calculating the count of occurrences for each crime. We use matplotlib to display a bar chart.

