IBM Capstone Project

■ Submitted by Sashank

The business problem -

To analysis the Boston Crime data.

To find the different types of committed in the city, correlation between the different crimes.

This analysis is done to understand the nature of crime and the relationship between them.

Doing this could shed light on various reasons and possible ways to prevent some crimes. We are also analyzing crimes based on different neighborhoods of the city.

Data -

Source 1 -

https://data.boston.gov/dataset/crime-incident-reports-august-2015-to-date-source-new-system

Details Regarding the Source 1 -

| TITLE | Crime Incident Reports (August 2015 - To Date) (Source: New System) |
|-------------|---|
| TYPE | ExternalTabular |
| DESCRIPTION | Crime incident reports are provided by Boston Police Department (BPD) to document the initial details surrounding an incident to which BPD officers respond. This is a dataset containing records from the new crime incident report system, which includes a reduced set of fields focused on capturing the type of incident as well as when and where it occurred. Records in the new system begin in June of 2015. |

| PUBLISHER | Department of Innovation and Technology |
|---------------------|--|
| TEMPORAL NOTES | This dataset contains records of crime incident reports using the new system starting in June of 2015. |
| THEME | Public safety |
| LOCATION | Boston (all) |
| CONTACT POINT | Boston Police Department |
| CONTACT POINT EMAIL | mediarelations@pd.boston.gov |
| LICENSE | Open Data Commons Public Domain Dedication and License (PDDL) |

The CSV contains – 17 Columns and 494021 Rows

Columns Data Types -

| SI No. | Columns | Туре |
|--------|---------------------|--------|
| 1 | INCIDENT_NUMBER | Int |
| 2 | OFFENSE_CODE | Int |
| 3 | OFFENSE_CODE_GROUP | String |
| 4 | OFFENSE_DESCRIPTION | String |
| 5 | DISTRICT | String |
| 6 | REPORTING_AREA | String |
| 7 | SHOOTING | String |
| 8 | OCCURRED_ON_DATE | Date |
| 9 | YEAR | Int |
| 10 | MONTH | Int |
| 11 | DAY_OF_WEEK | String |
| 12 | HOUR | Int |
| 13 | UCR_PART | String |
| 14 | STREET | String |
| 15 | Lat | float |

| 16 | Long | float |
|----|----------|--------|
| 17 | Location | String |

Source 2 - https://en.wikipedia.org/wiki/Boston_Police_Department

Contains the details regarding the different district codes.

Created a table from the above code to get the district names.

With the present data we have extensive records of crime which can be analyzed with the help of K Mean Method and clustered.