



TEAM MEMBERS TEAM: WINGS OF FIRE

JaiSachin Othiraja Saif Ali

CONCEPTS USED

- Pandas libraries
 - Matlab libraries
 - Seaborn libraries

WHAT IS EDA

Exploratory Data Analysis (EDA) is an essential step in the data analysis process, where analysts or data scientists examine and summarize the main characteristics, patterns, and insights within a dataset.

OUR CODE

```
import pandas as od
import matplotlib.pvplot as plt
import seaborn as sos
plt.style.use('gaplot')
ovlab inline
Populating the interactive namespace from numby and matplotlib
df = pd.read_csv('/Users/Haebichan/Desktop/crime data.csv', parse_dates = ['Time Occurred'])
df.columns = [col.strip() for col in df.columns] # Always check to see if there are problems with the data column nam
df.columns
Index(['DR Number', 'Date Reported', 'Date Occurred', 'Time Occurred',
       'Area ID', 'Area Name', 'Reporting District', 'Crime Code',
       'Crime Code Description', 'MO Codes', 'Victim Age', 'Victim Sex',
       'Victim Descent', 'Premise Code', 'Premise Description',
       'Weapon Used Code', 'Weapon Description', 'Status Code',
       'Status Description', 'Crime Code 1', 'Crime Code 2', 'Crime Code 3',
       'Crime Code 4', 'Address', 'Cross Street', 'Location'],
      dtype='object')
```

Analyzing of crimes from a broad perspective

Out [4]: RATTERY - STMPLE ASSAULT

VEHICLE - STOLEN

THEFT, PERSON

RURGI ARY ATTEMPTED

BURGI ARY

BURGLARY FROM VEHTCLE

THEFT PLATN - PETTY (\$950 & INDER)

THEFT OF IDENTITY 109739 INTIMATE PARTNER - SIMPLE ASSAULT 94987 VANDALISM - FELONY (\$400 & OVER, ALL CHURCH VANDALISMS) 0114 88442 VANDALTSM - MISDEAMEANOR (\$399 OR LINDER) 77983 ASSAULT WITH DEADLY WEAPON, AGGRAVATED ASSAULT 75268 THEFT FROM MOTOR VEHICLE - PETTY (\$950 & UNDER) 71954

In [4]: df["Crime Code Description"], value counts() # We have about 148 different types of crimes committed in LA

160176

135832

134836

125975

124666

11786

10810

PORRERY 70174 THEFT-GRAND (\$950.01 & OVER)EXCPT, GUNS, FOWL, LIVESTK, PROD0036 61618

CRIMINAL THREATS - NO WEAPON DISPLAYED 48618 SHOPLIFTING - PETTY THEFT (\$950 & UNDER) 39305

THEFT FROM MOTOR VEHICLE - GRAND (\$400 AND OVER) 25408 DOCUMENT FORGERY / STOLEN FELONY 28298

OTHER MISCELLANEOUS CRIME 17794

VIOLATION OF COURT ORDER 17369

TRESPASSING 16522

LETTERS. LEWD 16344 VIOLATION OF RESTRAINING ORDER 15263



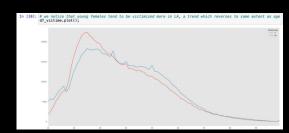
BASED ON LOCATION



BASED ON GENDER AND AGE

```
In [28]: df['Victim Sex'].value counts()
Out[28]: M
                745030
          Name: Victim Sex, dtype: int64
In [29]:
          df_victime = df.groupby(["Victim Age","Victim Sex"])["DR Number"].count().unstack()[["F","M"]]
          df_victime.head()
Out [29]:
           Victim Say
           Victim Age
               10.0 1793.0 5103.0
               11.0 2632.0 5651.0
               12.0 3733.0 5486.0
                13.0 5068.0 6456.0
               14.0 6025.0 7450.0
```

VISUAL REPRESENTATION



CRIME PATTERNS

| HOUSE HOUSE - GANG SHIR AND DATE | | |
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FACTORS FOR HIGH CRIME

CRIME RATES IN LOS ANGELES, LIKE IN ANY LARGE CITY, CAN BE INFLUENCED BY A COMPLEX INTERPLAY OF VARIOUS SOCIOECONOMIC, DEMOGRAPHIC, AND ENVIRONMENTAL FACTORS. WHILE IT'S CHALLENGING TO PINPOINT A SINGLE CAUSE FOR HIGH CRIME RATES. SOME OF THE MAIN FACTORS ASSOCIATED WITH ELEVATED CRIME LEVELS IN LOS ANGELES INCLUDE:

FACTORS FOR HIGH CRIME

- ECONOMIC DISPARITIES
 - GANG ACTIVITY
 - DRUG TRADE
 - HOMELESSNESS

LACK OF POILICE TRUST

- ACCESS TO FIREARMS CRIMINAL JUSTICE POLICIES

