Los Angeles City Crime Reports 2020-2024 Analysis

Introduction:

The project is about Los Angeles City Crime Reports analysis. I downloaded the required data from data.gov in a csv file and then converted the file. Then created tables in PostgreSQL and performed calculations and analysis using queries. Then used all the final data into tableau for visualization and dashboards.

Goal of the Project:

To uncover critical insights into crime trends and patterns, identify the most prevalent crimes, analyze crimes by victims' demographic attributes, assess crime distribution by location and type, and track changes in crime rates over four years.

Data source:

There are a lots of data sources but I have downloaded the data from https://data.gov/

Original and cleaned excel files:

The original file is Crime_Data_from_2020_to_Present.csv. I have changed it to cleaned.csv

PostgreSQL files

I have created tables in PostgreSQL and imported all the required data into it. Then performed analysis on it and exported the results into csv files. The source codes are mentioned in postgresql_files folder with 21 files.

Tableau files:

Utilized all the csv files to perform visual analysis. Build charts, graphs, geo maps, and interactive dashboards. The files are mentioned in tableau_files folder.

Analysis:

- Led a targeted analysis of Los Angeles City Crimes spanning from 2020 to 2024, aiming to uncover critical insights into crime trends and patterns.
- Done quantitative data analysis and exploratory data analysis to uncover more about the dataset. Performed Data research and data analysis.
- Developed probing analysis questions to drive the investigation, including identifying the most prevalent crimes, analyzing crimes by victims' demographic attributes, assessing crime distribution by location and type, and tracking changes in crime rates over four years.
- Employed a robust methodology encompassing data interviewing, mining, sorting, and visualization techniques to extract meaningful insights from the dataset.
- Leveraged advanced tools such as PostgreSQL and Tableau to streamline data processing and visualization, ensuring efficiency and accuracy throughout the analysis process.
- Uncovered impactful findings, including the identification of top crimes by area, analysis of crime occurrences by victims' age, sex, and descent, classification of crimes by type, and determination of the most frequently occurring crime.