Crime Data Analysis_ using SQL server

......It contains the basic query of SQl for analysis.....

The chicago 2023 crime date is analysed using SQl server by using views, case statement, percentage and geography.

1. View: Top 5 Most Common Crimes

CREATE VIEW topcrimes AS

SELECT TOP 5

primary_type,

COUNT(primary_type) AS count_of_crimes

FROM [chiago project].[dbo].[chicago_crime_2023]

GROUP BY primary_type

ORDER BY count_of_crimes DESC;

SELECT * FROM topcrimes;

2. View: Aggregating Crime Types

CREATE VIEW crime_type_frequencies AS

SELECT

primary_type,

COUNT(*) AS count_of_crimes

FROM [chiago project].[dbo].[chicago_crime_2023]

GROUP BY primary_type

ORDER BY count_of_crimes DESC;

SELECT * FROM crime_type_frequencies;

3. Calculate Arrest Percentage

SELECT

ROUND(COUNT(CASE WHEN arrest = 1 THEN 1 END) * 100.0 / COUNT(*), 4) AS arrest_percentage

FROM [chiago project].[dbo].[chicago_crime_2023];

4. Find the Most Unresolved Crimes

SELECT TOP 5

primary_type,

COUNT(*) AS unresolved_cases

FROM [chiago project].[dbo].[chicago_crime_2023]

WHERE arrest = 0

GROUP BY primary_type

ORDER BY unresolved_cases DESC;

5.Count of Crimes in the Last 6 Months

DECLARE @latest_date DATE = (SELECT MAX(date_reported) FROM [chiago project].[dbo]. [chicago_crime_2023]);

SELECT

COUNT(*) AS six_months_crime

FROM [chiago project].[dbo].[chicago_crime_2023]

WHERE date_reported > DATEADD(MONTH, -6, @latest_date);

6.Find the Top 10 Crime Hotspots

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SELECT TOP 10
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latitude,

longitude,

COUNT(primary_type) AS no_of_cases

FROM [chiago project].[dbo].[chicago_crime_2023]

GROUP BY latitude, longitude

ORDER BY no_of_cases DESC;