# **Customer Analysis Using Python and SQL**

This project combines the power of **Python** and **SQL** to analyze customer data effectively. The main task involved retrieving and processing data from a relational database to gain insights into customer distribution across different states.

## Skills and Technologies Used:

#### 1. SQL:

- Queried a database to count customers by state using aggregation functions like COUNT.
- Implemented structured queries with GROUP BY to organize data for analysis.

## 2. Python:

- Utilized pandas for database interaction and data manipulation.
- Created visualizations using matplotlib to present the customer distribution in an intuitive and impactful manner.

## 3. Data Integration:

 Integrated SQL with Python through a database engine to enable seamless data extraction and analysis.

#### Results:

The project successfully visualized the number of customers per state, revealing key patterns and trends in the data. The final output included an interactive bar chart, making the insights accessible and easy to interpret.