SQL FOR DATA ANALYSIS

Problem Statement:

This project aims to conduct a comprehensive analysis of employee attrition and performance within any organization, focusing on key aspects such as individual performance metrics, salary distribution, and the impact of job roles. By utilizing SQL queries in MySQL Workbench, we will extract valuable insights into employee performance, identify salary trends.The project's objectives include evaluating top and underperforming employees, analyzing salary distribution patterns, and understanding how different job roles contribute to attrition. The final deliverables will include SQL queries addressing these objectives, visualizations or summaries of key findings, and actionable insights to inform decision-making.

Resources:

Dataset:Kaggle
https://www.kaggle.com/datasets/pavansubhasht/ibm-hr-analytics-attrition-dataset
Tool: MySQL Workbench

Concepts:

1.SQL Operation
2.SQL Aggregations
3.SQL SubQueries

Solution:

To address the challenge of employee attrition and performance analysis, we will leverage SQL queries in MySQL Workbench to extract valuable insights from our dataset. For performance analysis, we will retrieve individual metrics, calculate average performance scores, and identify employees above or below a specified threshold. Salary distribution will be assessed by retrieving salary information, calculating averages, and visualizing distribution trends. Job role impact analysis will involve exploring the correlation between job roles and attrition rates, helping us identify common roles associated with attrition and understand the relationship between job roles and performance. The final deliverables will consist of well-crafted SQL queries, accompanied by visualizations and insights, providing a holistic understanding of the factors influencing employee attrition and performance within our organization.