Cab Booking System – SQL Project Report

1. Project Description:

This project simulates a Cab Booking System using SQL. It includes tables for drivers and customers, basic operations such as insert, update, views, string functions, and grouping. The project demonstrates essential database concepts and practical SQL queries for managing and analyzing booking data.

2. Objectives:

1. To create a mini cab management system.
2. To apply SQL operations like create, insert, update, views, and aggregations.
3. To demonstrate data handling using string, pattern, and group functions.

3. Tables Used:

1. driver(did, dname, phone, age, salary)
2. customer(cid, cname, phone, city)

4. Key Features:

1. Driver and Customer Tables with constraints.
2. Insertion of Records including duplicates for testing.
3. Updates and Pattern Matching on names.
4. Use of Views (single/multiple tables, with/without conditions).
5. Aggregate Functions to get counts, averages, sums.
6. String Functions like UPPER, LOWER, REVERSE.
7. Grouping and Ordering of records using GROUP BY and ORDER BY.

5. **SQL Commands Used:**

1. CREATE DATABASE
2. USE
3. CREATE TABLE
4. INSERT INTO
5. UPDATE
6. SELECT
7. JOIN
8. WHERE
9. LIKE and NOT LIKE
10. REPLACE, CONCAT, CHAR_LENGTH, UPPER, LOWER, REVERSE
11. AGGREGATE FUNCTIONS: COUNT(), SUM(), AVG(), MIN(), MAX()
12. GROUP BY with HAVING
13. ORDER BY
14. CREATE VIEW, DROP VIEW, INSERT INTO VIEW

6. **Output Highlights:**

1. Grouping customers by name to count and average IDs.
2. Pattern filtering (e.g., names starting with ‘K’).
3. Views for easy data access and filtering.
4. Ordering based on different fields (name, ID, name length).