# Day 7 – SQL Practice Questions

## 📊 Dataset: Employees, Projects & Timesheets

This dataset simulates a real-world workplace where employees are assigned to projects and log time. It includes relationships between employees, their assignments, and how they spend their working hours.

### Employees Table

|  |  |  |  |
| --- | --- | --- | --- |
| EmpID | EmpName | Department | Salary |
| 1 | Aditi | IT | 60000 |
| 2 | Rohit | HR | 50000 |
| 3 | Meena | Finance | 65000 |
| 4 | Karan | IT | 58000 |
| 5 | Sara | HR | 52000 |

### Projects Table

|  |  |  |
| --- | --- | --- |
| ProjectID | ProjectName | Department |
| 101 | Migration | IT |
| 102 | Recruitment Drive | HR |
| 103 | Audit 2024 | Finance |
| 104 | Website Redesign | IT |

### Timesheets Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TimeID | EmpID | ProjectID | WorkDate | HoursWorked |
| 1001 | 1 | 101 | 2024-01-05 | 5 |
| 1002 | 2 | 102 | 2024-01-06 | 7 |
| 1003 | 3 | 103 | 2024-01-07 | 6 |
| 1004 | 1 | 104 | 2024-01-08 | 4 |
| 1005 | 4 | 101 | 2024-01-09 | 8 |
| 1006 | 5 | 102 | 2024-01-10 | 5 |

## 📘 Practice Questions

1. List all employees along with the projects they have worked on.

2. Show total hours worked per employee.

3. Find the total hours worked on each project.

4. Identify employees who have worked on more than one project.

5. Display department-wise total hours worked.

6. Show average hours worked per employee per project.

7. List employees who have not logged any hours.

8. Show employees who worked more than 6 hours on any single day.

9. Rank employees by total hours worked (across all projects).

10. List each project with number of employees assigned and total hours spent.

## 🎯 Bonus Challenge

Write a query to find the top 2 employees in each department based on total hours worked.