

# MySQL Employees Database

## Topic: Queries Using MySQL Employees Database

### Instructions:

•Use the MySQL Employees Database (schema: employees, salaries, departments, dept\_emp, dept\_manager, titles).

•Write the SQL queries for each question and include the results as part of your submission.

•Ensure your queries include proper formatting, comments, and structure.

### Part 1: Basic Queries

1. Retrieve the first name, last name, and hire date of employees hired after January 1, 2000.
2. List the department names from the departments table where the department name starts with the letter 'S'.
3. Find all employees whose salary is greater than 80,000. Include their emp\_no, salary, and from\_date in the result.
4. Retrieve the titles and the count of employees for each title in the titles table. Sort the results by the count of employees in descending order.
5. List the department numbers and average salary of employees for each department. Sort the results by department number.

### Part 2: Joins and Set Operations

6. Retrieve the first name, last name, and department name of all employees working in the "Sales" department. (Use a join between employees, dept\_emp, and departments.)
7. List the first name, last name, and manager's first name for all employees who report to managers. (Use a join between employees and dept\_manager.)
8. Find the employee number and salary of employees whose salary is greater than the average salary of all employees.
9. Retrieve the employee numbers of employees who work in the "Sales" or "Marketing" departments. (Use UNION to combine results.)
10. List the first name and last name of employees who have never worked in any department.

### Part 3: Nested Queries

11. Retrieve the employee number, salary, and department name of employees who earn more than the average salary of their department.
12. Find the first name and last name of employees who hold the title of "Manager" and earn the highest salary in their department.
13. List the department names where the average salary of employees exceeds 70,000.
14. Retrieve the employee number and title of employees whose salary is greater than the maximum salary in department "d005".

**15.** Find the employee numbers of employees who have worked in more than one department.

**Part 4: Views and Aggregations**

**16.** Create a view named high\_salary\_employees that lists the emp\_no, first\_name, last\_name, and salary of employees earning more than 100,000.

**17.** Use the high\_salary\_employees view to retrieve all employees working in the “Development” department.

**18.** Create a view named dept\_avg\_salary that shows the department number, department name, and average salary for each department.

**19.** Retrieve departments where the average salary (from the dept\_avg\_salary view) is greater than 90,000.

**20.** Find the top 5 highest-paid employees, including their first name, last name, and salary.