**Practice Questions**

1. **Retrieve all records** from a table named Employees.

**Ans:**

**SELECT \*FROM Employees;**

1. **Get the distinct departments** from the Employees table.

**Ans:**

**SELECT DISTINCT department\_id FROM Employees;**

1. **Count the total number of employees** in the Employees table.

**Ans:**

**SELECT COUNT(\*) AS total\_employees FROM Employees;**

1. Retrieve all employees whose salary is **greater than 50,000**.

**Ans:**

**SELECT \* FROM Employees**

**WHERE salary>50000;**

1. List names of employees whose **name starts with 'A'**.

**Ans:**

**SELECT \* FROM Employees**

**WHERE name LIKE ‘A%’;**

1. Fetch the top 5 highest-paid employees.

**Ans:**

**SELECT \* FROM Employees**

**ORDER BY salary DESC**

**LIMIT 5;**

1. Retrieve employees who **do not have a manager (i.e., NULL in manager\_id)**.

**Ans:**

**SELECT \* FROM Emploees**

**WHERE manager\_id IS NULL;**

1. Show all columns from Employees where hire\_date is in 2024.

**Ans:**

**SELECT \* FROM Employees**

**WHERE YEAR(hire\_date) = 2024;**

1. Fetch records where **department\_id is either 10, 20, or 30**.

**Ans:**

**SELECT \* FROM Employees**

**WHERE department\_id IN (10,20,30);**

1. Get the **total salary paid to all employees**.

**Ans:**

**SELECT SUM(salary) AS total\_salary FROM Employees;**

1. Fetch employee names along with their department names (use Employees and Departments tables).

**Ans:**

**SELECT e.name AS employee\_name,**

**d.department\_name**

**FROM Employees e**

**JOIN Departments d**

**ON e.department\_id = d.department\_id;**

1. List all employees and their manager names.

**Ans:**

**SELECT e.employee\_id,**

**e.name AS employee\_name,**

**m.name AS manager\_name**

**FROM Employees e**

**LEFT JOIN Employees m**

**ON e.manager\_id = m.employee\_id;**

1. Show employees who work in the same department as 'John'.

**Ans:**

**SELECT \* FROM Employees**

**WHERE department\_id = (**

**SELECT department\_id FROM Employees**

**WHERE name = 'John'**

**);**

1. Get a list of employees and their project names using a many-to-many relationship (via EmployeeProjects table).

**Ans:**

**SELECT e.name, p.project\_name**

**FROM Employees e**

**JOIN EmployeeProjects ep ON e.employee\_id = ep.employee\_id**

**JOIN Projects p ON ep.project\_id = p.project\_id;**

1. Write a query to display employees with no assigned project.

**Ans:**

**SELECT e.name**

**FROM Employees e**

**LEFT JOIN EmployeeProjects ep**

**ON e.employee\_id = ep.employee\_id**

**WHERE ep.project\_id IS NULL;**