

## Step 1: Create Table

```
CREATE TABLE employees (
    id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(100),
    department VARCHAR(50),
    gender VARCHAR(10),
    age INT,
    salary DECIMAL(10,2),
    is_active BOOLEAN,
    join_date DATE
);
```

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## Step 2: Insert Demo Data

```
INSERT INTO employees (name, department, gender, age, salary, is_active,
join_date) VALUES
('Amit Sharma', 'IT', 'Male', 28, 55000.50, TRUE, '2022-03-15'),
('Neha Verma', 'HR', 'Female', 25, 42000.00, TRUE, '2023-01-10'),
('Rahul Singh', 'Finance', 'Male', 35, 75000.75, TRUE, '2021-06-20'),
('Priya Mehta', 'IT', 'Female', 30, 68000.00, FALSE, '2020-11-05'),
('Suresh Kumar', 'Sales', 'Male', 40, 50000.00, TRUE, '2019-08-12'),
('Anjali Rao', 'HR', 'Female', 27, 46000.25, TRUE, '2022-09-01'),
('Vikas Patel', 'Finance', 'Male', 32, 72000.00, FALSE, '2021-12-18');
```

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## Step 3: SQL CRUD Questions

### CREATE (INSERT)

1. Insert a new employee named **Rohit Gupta** in the IT department with salary 60000.
  2. Insert an employee but do not specify the salary.
  3. Insert multiple employees in a single query.
  4. Insert an employee whose `is_active` value is FALSE.
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### READ (SELECT)

5. Display all employees.
6. Show only name, department, and salary.
7. Find all employees working in the **IT** department.
8. List employees whose salary is greater than 60000.
9. Fetch all **active** employees.
10. Find employees who joined after 2022-01-01.
11. Display the highest salary.
12. Count the number of employees in each department.
13. Find the average salary of the Finance department.
14. List employees sorted by salary in descending order.

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## **UPDATE**

15. Update the salary of **Amit Sharma** to 58000.
  16. Set `is_active = FALSE` for employees in the Sales department.
  17. Increase salary by 10% for all IT employees.
  18. Update department to **HR** for employee with `id = 3`.
  19. Set all inactive employees to active.
  20. Update salary to 50000 for all employees except `id 1 and 2`.
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## **DELETE**

21. Delete employee with `id = 5`.
22. Delete all inactive employees.
23. Delete employees who joined before `2021-01-01`.
24. Delete all employees from the table without dropping it.
25. Delete employees whose salary is less than 45000.