■ SQL Developer Internship – Task 2

Data Insertion and Handling NULLs

Objective

The goal of this task is to practice Data Manipulation Language (DML) operations:
- INSERT (with full values, partial values, and NULL handling)
- UPDATE (single row & multiple rows)
- DELETE (with conditions)
- DEFAULT and NOT NULL constraints
- Verifying results using SELECT

Tools Used

- DB Fiddle (https://www.db-fiddle.com) for quick testing
- SQLiteStudio / MySQL for local execution

Files in Repo

- task2.sql → SQL script with all queries
- README.md → Explanation of task

Schema Used

```
CREATE TABLE Employee (
emp_id INT PRIMARY KEY,
name VARCHAR(100) NOT NULL,
department VARCHAR(50),
salary DECIMAL(10,2) DEFAULT 0,
manager_id INT
);
```

Queries Demonstrated

1. INSERT Examples
- Full insert with all values
- Insert with NULL for department
- Insert with only mandatory columns → salary uses DEFAULT

2. UPDATE Examples
- Update salary of one employee
- Update department where it is NULL

3. DELETE Example
- Delete one employee using WHERE

4. SELECT Example
- Retrieve all data from the table

Sample Output After Queries

emp_id	name	department	salary	manager_id
101	Alice	HR	50000.00	NULL
102	Bob	IT	60000.00	101
103	John	Sales	65000.00	102
104	Diana	Finance	55000.00	101

How to Run

1. Copy the contents of task2.sql into DB Fiddle or your MySQL client.
2. Run queries step by step.
3. Verify results with the final SELECT * FROM Employee;