Title:

Implementation of DML commands of SQL

Intro:

In this lab assignment, we will focus on Data Manipulation Language (DML) commands in SQL. DML commands are used to manage data within database objects such as tables. We will cover the INSERT, SELECT, UPDATE, and DELETE commands, demonstrating their usage with examples.

Code:

Creating a Table (for reference):

```sql
Copy code
CREATE TABLE Employees (
    EmployeeID INT PRIMARY KEY,
    FirstName VARCHAR(50),
    LastName VARCHAR(50),
    Department VARCHAR(50),
    Salary DECIMAL(10, 2)
);
```

Inserting Data:

```sql
Copy code
INSERT INTO Employees (EmployeeID, FirstName, LastName, Department, Salary)
VALUES
(1, 'Alice', 'Brown', 'HR', 50000.00),
(2, 'Bob', 'Smith', 'Engineering', 70000.00),
(3, 'Charlie', 'Davis', 'Marketing', 60000.00);
```

Selecting Data:

```sql
sql
Copy code
SELECT * FROM Employees;
```

Updating Data:

```sql
sql
Copy code
UPDATE Employees
SET Salary = 75000.00
WHERE EmployeeID = 2;
```

Deleting Data:

```sql
sql
Copy code
DELETE FROM Employees
WHERE EmployeeID = 1;
```

Output:

After Inserting Data:

EmployeeID	FirstName	LastName	Department	Salary
1	Alice	Brown	HR	50000.00
2	Bob	Smith	Engineering	70000.00
3	Charlie	Davis	Marketing	60000.00

After Selecting Data:

EmployeeID	FirstName	LastName	Department	Salary
1	Alice	Brown	HR	50000.00
2	Bob	Smith	Engineering	70000.00
3	Charlie	Davis	Marketing	60000.00

After Updating Data:

EmployeeID	FirstName	LastName	Department	Salary

1	Alice	Brown	HR	50000.00
2	Bob	Smith	Engineering	75000.00
3	Charlie	Davis	Marketing	60000.00

After Deleting Data:

EmployeeID	FirstName	LastName	Department	Salary
2	Bob	Smith	Engineering	75000.00
3	Charlie	Davis	Marketing	60000.00

Conclusion:

In this lab, we demonstrated the use of DML commands in SQL. We learned how to insert data into a table using the INSERT command, retrieve data using the SELECT command, update existing records with the UPDATE command, and remove records using the DELETE command. These operations are essential for managing and manipulating data in a database effectively.