Lab2

Title: Data Manipulation Language (DML)

Objective:

To practice and implement Data Manipulation Language commands.

This lab focuses on core DML operations using SQL, including inserting, updating, selecting, and deleting data. Students will create an **employee** table and perform practical tasks like bulk record insertion, conditional updates, and filtered queries.

Questions:

Create a database Lab2 and a table employee with the following structure:

Column Name	Data Type
E_ID	INT
E_NAME	VARCHAR(20)
E_JOB	VARCHAR(20)
E_SALARY	INT

SQL Queries

1. Create Database and Table

```
CREATE DATABASE Lab2;
USE Lab2;

CREATE TABLE employee (
    E_ID INT,
    E_NAME VARCHAR(20),
    E_JOB VARCHAR(20),
    E_SALARY INT
);
```

Output:



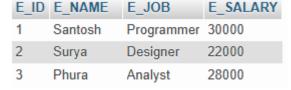
2. Insert a single record in the employee table

SQL Queries

3. Insert more than one record in the employee table using a single insert command.

SQL Queries

Output:



4. Update the employee table to set salary of all employees to Rs. 25,000 who work as programmer.

SQL Queries

```
UPDATE employee
SET E_SALARY = 25000
WHERE E_JOB = 'Programmer';
```

Output:

$E_{-}ID$	E_NAME	E_JOB	E_SALARY
1	Santosh	Programmer	25000
2	Surya	Designer	22000
3	Phura	Analyst	28000

5. Select all information from the employee table.

SQL Queries



6. Select employee name (e_name) and job (e_job) from the employee table.

SQL Queries



7. Delete employees working as designer.

SQL Queries



8. Display only employees who work as analyst.

SQL Queries

```
SELECT * FROM employee
WHERE E_JOB = 'Analyst';
```

Output:

E_ID	E_NAME	E_JOB	E_SALARY
3	Phura	Analyst	28000

9. Display employee job (e_job) from the table while avoiding duplicate values.

SQL Queries

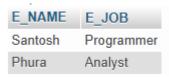
SELECT DISTINCT E_JOB FROM employee; Output: E_JOB Programmer Analyst

10. Display employee name (e_name) and job (e_job) for employees with a salary ≥ Rs. 20,000.

SQL Queries

```
SELECT E_NAME, E_JOB
FROM employee
WHERE E_SALARY >= 20000;
```

Output:

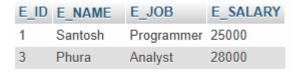


Appendix: Final Table State

SQL Queries

SELECT * FROM employee;

Output:



Conclusion

This lab successfully demonstrated key DML operations for manipulating database records, including inserting, updating, querying, and deleting data. The exercises provide a strong foundation for real-world database administration and data-driven application development.

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Objective

To practice and implement Data Manipulation Language commands.

Lab Exercise

Create a Database named Lab2 and a table called employee with the following structure:

Column Name Data Type

e_id int

e_name varchar(20)

e_job varchar(20)

e_salary int

Tasks

- 1. Insert a single record in the employee table.
- 2. Insert more than one record in the employee table using a single insert command.
- 3. **Update the** employee **table to set salary of all employees to Rs. 25,000 who work as** programmer.
- 4. **Select all information from the** employee **table.**
- 5. Select employee name (e_name) and job (e_job) from the employee table.
- 6. **Delete employees working as** designer.
- 7. Display only employees who work as analyst.
- 8. Display employee job (e_job) from the table while avoiding duplicate values.
- 9. Display employee name (e_name) and job (e_job) for employees with a salary ≥ Rs. 20,000.

Lab report answer.