A.Y. 2023-2024
Class: SE-ITA/B, Semester: III

Subject: **Structured Query Lab**

Experiment – 4: Perform data manipulations operations on populated database

1. **Aim: To Perform data manipulations operations on populated database using DML queries.**

2. **Objective:** After performing the experiment, the students will be able to formulate and use various SQL queries for construction and manipulation of tables.

3. **Outcome:** L303.4: Formulate, write query using SQL commands.

4. **Prerequisite:** Understanding of various constraints, DML queries, notationsand terminologies along with sample syntax.

5. **Requirements:** PC, MySQL Workbench,Oracle 11g/SQL Server 2008 R2, MySQL Workbench ,Microsoft Word, Internet

6. **Pre-Experiment Exercise:**
Brief Theory:(To be hand written)
1.What is DML ?
2.Explain DML commands with syntax & example?

7. **Laboratory Exercise**
A. Procedure:
   i)   Open mysql workbench and enter below credentials:
           Password: lab306b
   ii)   Create a new query
   iii)   Construct your own database
   iv)   Construct tables for any three to four entities from your choosen case study
   v)   Insert atleast 8 to 10 records for each tables

   vi)   Use DML queries to retrieve manipulate data from the tables using below syntax

        INSERT Command:

INSERT INTO student VALUES('A101', 'Mohd', 'Imran', '01-MAR-89','Allahabad', 211001);

        SELECT Command:
        Syntax: **SELECT * FROM Table_name;**

        eg: Select * from Student;
        It will show all the table records.

        If you want to select only few attributes then use below syntax
        SELECT CustomerName, City FROM Customers;

DELETE Operation:

DELETE FROM student WHERE reg_no='A101';
If condition will be satisfied then it will delete a row from the table Register number A101 will be deleted from the table

UPDATE Operation:
UPDATE Student SET course='MCA';

B. Result/Observation/Program code: Attach all queries executed code with proper output.

8.   Post Experimental Exercise-(Hand written)
 A. Questions:
 1. Difference between DDL and DML queries.
 2. Difference between delete, drop, truncate.

B. Conclusion:
 1. Write what was performed in the experiment
 2. Mention few applications of what was studied.
 3. Write the significance of the studied topic

C. References:
[1]   Elmasri and Navathe, "Fundamentals of Database Systems", 5th Edition, PEARSON Education.
[2] Korth, Silberchatz, Sudarshan, "Database System Concepts", 6th Edition, McGraw – Hill
[3]https://www.w3schools.com/sql/sql_default.asp