List of Experiments

S.E. (Comp.) Sem IV

Subject: Database Management System Lab

Subject Incharge : Dr. Seema Kolkur   **Date :17/1/2022**

Lab Code: CSL402

Title of Experiments

1   Identify the case study and detail statement of problem.

Design an Entity-Relationship (ER) / Extended Entity-Relationship (EER) Model.

Tip : Use Online tool : https://www.diagrameditor.com/

2   Mapping ER/EER to Relational schema model.

Tip : Draw Database Diagram (any tool or handwritten) using mapping rules

3   Create database using Data Definition Language (DDL) and apply appropriate

Integrity Constraints for your the specified System.

(Create and Desc table commands, Modify table if needed)

Tip : use https://livesql.oracle.com/apex/f?p=590:1000

refer this youtube link to understand how to use

https://www.youtube.com/watch?v=4oxsxJQQC-s

4   Populate database using DML Commands for the specified system.

(Insert commands)

5   Perform Simple queries, string manipulation operations and aggregate

functions.

6   Nested queries and Complex queries

7   Perform Join operations (All types of joins)

8   Implementation of Views and Triggers

9   Implementation of Procedure and Functions

10   Perform DCL and TCL Commands

          (DCL- Grant, Revoke Commands

          TCL- Commit, Rollback and Savepoints commands)

11   Demonstrate Database connectivity

12   Implementation and demonstration of Transaction and Concurrency control techniques using locks.

Written Assignments:

Assignment 1:

1) Explain advantages of DBMS over file systems.

2) Explain database architecture in detail with appropriate diagram.

3) Explain role of a Database Administrator

Assignment 2:

1) Explain conflict serializability and view serializability in detail with examples.

2) Explain lock-based and timestamp based concurrency protocols in detail

Explain 3) 1NF, 2NF, 3NF, BCNF and 4NF with appropriate examples.

                              Subject-Incharge

                              Dr. Seema Kolkur