

List of Experiments

S.E. (Comp.) Sem IV

Subject: Database Management System Lab

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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 specified System.
(Create and Desc table commands, Modify table if needed)
- 4 Populate database using DML Commands for the specified system.
- 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

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
- 3) Explain 1NF, 2NF, 3NF, BCNF, 4NF and 5NF with appropriate examples.

Subject-Incharge

Shilpa Ingole