School of Computer Science Engineering and Technology

Course- BTech	Type- Core
Course Code- CSET201	Course Name- Information Management System (Lab)
Year- 2025	Semester- Odd
Date-	Batch- 2024-2028

CO-Mapping

	CO1	CO2	CO3
Q1			√
Q2			√
Q3			√
Q4			√
Q5			√
Q6			√
Q7			√
Q8			√
Q9			√
Q10			√

Lab Assignment No. (Week 11, Assignment No. 9)

```
CREATE DATABASE LibraryDB;

USE LibraryDB;

CREATE TABLE Books (
   Book_id INT PRIMARY KEY,
   Title VARCHAR(100),
   Author VARCHAR(50),
   Price DECIMAL(10,2)
);


CREATE TABLE Members (
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```
  Member_id INT PRIMARY KEY,
  Mname VARCHAR(50),
  City VARCHAR(50),
  Phone VARCHAR(15)
);

CREATE TABLE Issues (
  Issue_id INT PRIMARY KEY,
  Book_id INT,
  Member_id INT,
  Issue_date DATE,
  Return_date DATE,
  FOREIGN KEY (Book_id) REFERENCES Books(Book_id),
  FOREIGN KEY (Member_id) REFERENCES Members(Member_id)
);
INSERT INTO Books VALUES
(101, 'DBMS Concepts', 'Navathe', 450),
(102, 'Operating Sys', 'Galvin', 550),
(103, 'Python Prog', 'Mark Lutz', 600);

INSERT INTO Members VALUES
(201, 'Ankit', 'Delhi', '9876543210'),
(202, 'Neha', 'Mumbai', '9123456780'),
(203, 'Soham', 'Pune', '9988776655');

INSERT INTO Issues VALUES
(301, 101, 201, '2023-10-01', '2023-10-10'),
(302, 102, 202, '2023-10-02', '2023-10-12');

INSERT INTO Books VALUES (104, 'AI Basics', 'Stuart Russell', 700);
INSERT INTO Issues VALUES (303, 104, 201, '2023-10-05', '2023-10-15');
```

```
UPDATE Issues
SET Return_date = '2023-10-20'
WHERE Issue_id = 301;
COMMIT;

SET autocommit = 0;

START TRANSACTION;
DELETE FROM Issues WHERE Member_id = 202;
DELETE FROM Members WHERE Member_id = 202;
ROLLBACK;

UPDATE Books SET Price = 480 WHERE Book_id = 101;
SAVEPOINT price_change;

INSERT INTO Members VALUES (204, 'Karan', 'Bangalore', '9812345678');
INSERT INTO Issues VALUES (304, 101, 204, '2023-10-06', '2023-10-16');
INSERT INTO Issues VALUES (305, 103, 204, '2023-10-06', '2023-10-16');

INSERT INTO Books VALUES (105, 'Data Science', 'Andrew Ng', 650);
DELETE FROM Books WHERE Book_id = 105;
COMMIT;

START TRANSACTION;
SAVEPOINT s1;
UPDATE Books SET Author = 'Unknown' WHERE Book_id = 103;
ROLLBACK TO s1;
COMMIT;

SET SQL_SAFE_UPDATES = 0;

START TRANSACTION;
```

UPDATE Books SET Price = Price - 50;

ROLLBACK;

INSERT INTO Issues VALUES (306, 103, 201, '2023-10-08', '2023-10-18');

ROLLBACK;

DELETE FROM Issues WHERE Member_id = 203;

ROLLBACK;

WEEK 11(ASSIGNMENT 10)

```
test> use employeeDB ;
switched to db employeeDB
employeeDB> db.createCollection("employees");
{ ok: 1 }
employeeDB> db . employees . insertOne ({ name : "John Smith " , age : 25 , department : " Computer Science " }) ;
{
  acknowledged: true,
  insertedId: ObjectId('690042c4c65fa3bed0cebea4')
}
employeeDB> db . employees . find () . pretty () ;
[
  {
    _id: ObjectId('690042c4c65fa3bed0cebea4'),
    name: 'John Smith ',
    age: 25,
    department: ' Computer Science '
  }
]
```

```
employeeDB> db.employees.insertMany([
...   { name: "Ed Shreen", age: 26, department: "HR" },
...   { name: "Will Smith", age: 28, department: "Operations" }
... ]);
...
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('690045e9c65fa3bed0cebea5'),
    '1': ObjectId('690045e9c65fa3bed0cebea6')
  }
}
employeeDB> db . employees . find () . pretty () ;
[
  {
    _id: ObjectId('690042c4c65fa3bed0cebea4'),
    name: 'John Smith ',
    age: 25,
    department: ' Computer Science '
  },
  {
    _id: ObjectId('690045e9c65fa3bed0cebea5'),
    name: 'Ed Shreen',
    age: 26,
    department: 'HR'
  },
  {
    _id: ObjectId('690045e9c65fa3bed0cebea6'),
    name: 'Will Smith',
    age: 28,
    department: 'Operations'
  }
]
employeeDB> db . employees . findOne ({ age : 26 }) ;
{
  _id: ObjectId('690045e9c65fa3bed0cebea5'),
  name: 'Ed Shreen',
  age: 26,
  department: 'HR'
}
employeeDB> db . students . deleteMany ({ age : { $lt : 26 } }) ;
{ acknowledged: true, deletedCount: 0 }
employeeDB>
```