

# **DBMS EXPERIMENTS**

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## **EXPERIMENT-2**

### **QUESTION-1**

CREATE TABLE CUSTOMERS(

    ID INT NOT NULL,

    CUST\_NAME VARCHAR(45) NOT NULL,

    DESIGNATION VARCHAR(45) NOT NULL);

INSERT INTO CUSTOMERS VALUES(1, "abc", "A");

INSERT INTO CUSTOMERS VALUES(2, "pqr", "B");

INSERT INTO CUSTOMERS VALUES(3, "mno", "C");

CREATE TABLE ORDERS(

    ORID INT NOT NULL,

    AMOUNT INT NOT NULL,

    CUST\_ID INT NOT NULL

);

INSERT INTO ORDERS VALUES(601, 10000, 1);

INSERT INTO ORDERS VALUES(602, 2000, 4);

INSERT INTO ORDERS VALUES(603, 15000, 2);

1.SELECT \* FROM CUSTOMERS INNER JOIN ORDERS ON CUSTOMERS.ID = ORDERS.CUST\_ID

2.SELECT \* FROM CUSTOMERS RIGHT JOIN ORDERS ON CUSTOMERS.ID = ORDERS.CUST\_ID

3.SELECT \* FROM CUSTOMERS LEFT JOIN ORDERS ON CUSTOMERS.ID = ORDERS.CUST\_ID

4.SELECT \* FROM CUSTOMERS LEFT JOIN ORDERS ON CUSTOMERS.ID = ORDERS.CUST\_ID

UNION SELECT \* FROM CUSTOMERS RIGHT JOIN ORDERS ON CUSTOMERS.ID = ORDERS.CUST\_ID

## **QUESTION-2**

1. Primary key in the first table is Accession\_Number which is the foreign key of the second table.

```
CREATE TABLE LIBRARYBOOKS(
```

```
    ACCESSION_NUMBER INT NOT NULL,
```

```
    TITLE VARCHAR(45) NOT NULL,
```

```
    AUTHOR VARCHAR(45) NOT NULL,
```

```
    DEPARTMENT VARCHAR(45) NOT NULL,
```

```
    PURCHASEDATE DATE NOT NULL,
```

```
    PRICE INT NOT NULL,
```

```
    CONSTRAINT LIBRARYBOOKSPK PRIMARY KEY(ACCESSION_NUMBER));
```

```
INSERT INTO LIBRARYBOOKS VALUES(101, "DATABASE SYSTEM CONCEPTS", "NAVATHE", "CS",  
"2003-03-23", 480);
```

```
INSERT INTO LIBRARYBOOKS VALUES(102, "DISCRETE MATHS MADE EASY", "RK MISHRA", "DISCRETE  
MATHS", "2000-01-24", 510);
```

```
INSERT INTO LIBRARYBOOKS VALUES(103, "DESIGN AND ANALYSIS OF ALGORITHMS", "OP TANDON",  
"COMPETITIVE PROGRAMMING", "2001-05-18", 560);
```

```
INSERT INTO LIBRARYBOOKS VALUES(104, "COMPUTER ARCHITECTURE", "CORMEN", "CS", "2002-12-12",  
470);
```

```
INSERT INTO LIBRARYBOOKS VALUES(105, "MICROPROCESSORS", "SIDWICK", "ELECTRONICS",  
"1999-07-08", 340);
```

```
CREATE TABLE ISSUEDBOOKS(
```

```
    ACCESSION_NUMBER INT NOT NULL,
```

```
    BORROWER VARCHAR(45) NOT NULL,
```

```
    CONSTRAINT ISSUEDBOOKSFK FOREIGN KEY(ACCESSION_NUMBER) REFERENCES  
LIBRARYBOOKS(ACCESSION_NUMBER));
```

```
INSERT INTO ISSUEDBOOKS VALUES(101, "ARYAN");
```

```
INSERT INTO ISSUEDBOOKS VALUES(104, "AKHIL");
```

```
INSERT INTO ISSUEDBOOKS VALUES(103, "AMAN");
```

INSERT INTO ISSUEDBOOKS VALUES(105, "NIKHIL");

INSERT INTO ISSUEDBOOKS VALUES(102, "VISHAL");

1. DELETE FROM LIBRARYBOOKS WHERE TITLE = "DATABASE SYSTEM CONCEPTS";

2.UPDATE LIBRARYBOOKS SET DEPARTMENT = "CS" WHERE DEPARTMENT = "DISCRETE MATHS";

3.SELECT \* FROM LIBRARYBOOKS WHERE DEPARTMENT = "CS";

4.SELECT \* FROM LIBRARYBOOKS WHERE DEPARTMENT = "CS" AND AUTHOR = "NAVATHE";

5.SELECT \* FROM LIBRARYBOOKS L, ISSUEDBOOKS I WHERE L.DEPARTMENT = "CS" AND  
L.ACCESSION\_NUMBER = I.ACCESSION\_NUMBER

6.SELECT \* FROM LIBRARYBOOKS L, ISSUEDBOOKS I WHERE L.PRICE <= 500 OR L.PURCHASEDATE <= "01-01-2003" AND L.PURCHASEDATE >= "01-01-1999" AND L.ACCESSION\_NUMBER = I.ACCESSION\_NUMBER;