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Lab Assignment 2

Problem Statement:
1. Create following Tables cust_mstr(cust_no,fname,lname)
add_dets(code_no,add1,add2,state,city,pincode)

```
mysql> CREATE DATABASE bank_demo;
Query OK, 1 row affected (0.01 sec)

mysql> USE bank_demo;
Database changed
mysql> CREATE TABLE cust_mstr (
    ->   cust_no INT PRIMARY KEY,
    ->   fname VARCHAR(50),
    ->   lname VARCHAR(50)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> CREATE TABLE add_dets (
    ->   code_no INT,
    ->   add1 VARCHAR(100),
    ->   add2 VARCHAR(100),
    ->   state VARCHAR(50),
    ->   city VARCHAR(50),
    ->   pincode VARCHAR(10),
    ->   FOREIGN KEY (code_no) REFERENCES cust_mstr(cust_no)
    -> );
Query OK, 0 rows affected (0.06 sec)

mysql> INSERT INTO cust_mstr VALUES (1,'sudhir','singh');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO cust_mstr VALUES (2,'rahul','singh');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO add_dets VALUES (1,'Street1','Lane1','MH','Pune','411044');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO add_dets VALUES (2,'Street2','Lane2','MH','Nigdi','411045');
Query OK, 1 row affected (0.01 sec)

mysql> select * from cust_mstr;
+---------+--------+-------+
| cust_no | fname  | lname |
+---------+--------+-------+
|       1 | sudhir | singh |
|       2 | rahul  | singh |
+---------+--------+-------+
2 rows in set (0.00 sec)

mysql> select * from add_dets;
+---------+---------+-------+-------+-------+---------+
| code_no | add1    | add2  | state | city  | pincode |
+---------+---------+-------+-------+-------+---------+
|       1 | Street1 | Lane1 | MH    | Pune  | 411044  |
|       2 | Street2 | Lane2 | MH    | Nigdi | 411045  |
+---------+---------+-------+-------+-------+---------+
2 rows in set (0.00 sec)
```

Retrieve the address of customer Fname as 'sudhir' and Lname as 'singh'

```
mysql> -- Retrieve the address of customer Fname as 'sudhir' and Lname as 'singh'
mysql> SELECT a.add1,a.add2,a.state,a.city,a.pincode
    -> FROM cust_mstr c
    -> JOIN add_dets a ON c.cust_no=a.code_no
    -> WHERE c.fname='sudhir' AND c.lname='singh';
+---------+-------+-------+------+---------+
| add1    | add2  | state | city | pincode |
+---------+-------+-------+------+---------+
| Street1 | Lane1 | MH    | Pune | 411044  |
+---------+-------+-------+------+---------+
1 row in set (0.00 sec)
```

2. Create following Tables cust_mstr(custno,fname,lname) acc_fd_cust_dets(codeno,acc_fd_no) fd_dets(fd_sr_no,amt)

```
mysql> CREATE TABLE acc_fd_cust_dets (
    ->   code_no INT,
    ->   acc_fd_no INT,
    ->   PRIMARY KEY(code_no,acc_fd_no)
    -> );
Query OK, 0 rows affected (0.04 sec)

mysql> CREATE TABLE fd_dets (
    ->   fd_sr_no INT PRIMARY KEY,
    ->   amt DECIMAL(10,2)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO acc_fd_cust_dets VALUES (1,101);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO acc_fd_cust_dets VALUES (2,102);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO fd_dets VALUES (101,7000);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO fd_dets VALUES (102,4000);
Query OK, 1 row affected (0.01 sec)

mysql> select * from acc_fd_cust_dets;
+---------+-----------+
| code_no | acc_fd_no |
+---------+-----------+
|       1 |       101 |
|       2 |       102 |
+---------+-----------+
2 rows in set (0.00 sec)

mysql> select * from fd_dets;
+----------+---------+
| fd_sr_no | amt     |
+----------+---------+
|      101 | 7000.00 |
|      102 | 4000.00 |
+----------+---------+
```

List the customer holding fixed deposit of amount more than 5000

```
mysql> -- List the customer holding fixed deposit of amount more than 5000
mysql> SELECT c.fname,c.lname,f.amt
    -> FROM cust_mstr c
    -> JOIN acc_fd_cust_dets a ON c.cust_no=a.code_no
    -> JOIN fd_dets f ON a.acc_fd_no=f.fd_sr_no
    -> WHERE f.amt>5000;
+--------+-------+---------+
| fname  | lname | amt     |
+--------+-------+---------+
| sudhir | singh | 7000.00 |
+--------+-------+---------+
1 row in set (0.00 sec)
```

3. Create following Tables emp_mstr(e_mpno,f_name,l_name,m_name,dept,desg,branch_no) branch_mstr(name,b_no)

```
mysql> CREATE TABLE emp_mstr (
    ->   emp_no INT PRIMARY KEY,
    ->   f_name VARCHAR(50),
    ->   l_name VARCHAR(50),
    ->   m_name VARCHAR(50),
    ->   dept VARCHAR(50),
    ->   desg VARCHAR(50),
    ->   branch_no INT
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> CREATE TABLE branch_mstr (
    ->   b_no INT PRIMARY KEY,
    ->   name VARCHAR(50)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO branch_mstr VALUES (11,'Akurdi');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO branch_mstr VALUES (12,'Nigdi');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO emp_mstr VALUES (1001,'Ravi','Patil','A','IT','Manager',11);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO emp_mstr VALUES (1002,'Sarthak','Joshi','B','HR','Executive',12);
Query OK, 1 row affected (0.01 sec)

mysql> select * from emp_mstr;
+--------+---------+--------+--------+------+-----------+-----------+
| emp_no | f_name  | l_name | m_name | dept | desg      | branch_no |
+--------+---------+--------+--------+------+-----------+-----------+
|   1001 | Ravi    | Patil  | A      | IT   | Manager   |        11 |
|   1002 | Sarthak | Joshi  | B      | HR   | Executive |        12 |
+--------+---------+--------+--------+------+-----------+-----------+
2 rows in set (0.00 sec)
```

List the employee details along with branch names to which they belong

```
mysql> select * from branch_mstr;
+------+--------+
| b_no | name   |
+------+--------+
|   11 | Akurdi |
|   12 | Nigdi  |
+------+--------+
2 rows in set (0.00 sec)
```

4. Create following Tables emp_mstr(emp_no,f_name,l_name,m_name,dept)
cntc_dets(code_no,cntc_type,cntc_data)

```
mysql> CREATE TABLE cntc_dets (
    ->   code_no INT,
    ->   cntc_type VARCHAR(50),
    ->   cntc_data VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> INSERT INTO cntc_dets VALUES (1001,'Mobile','9999999999');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO cntc_dets VALUES (1002,'Email','abc@gmail.com');
Query OK, 1 row affected (0.01 sec)

mysql> select * from cntc_dets;
+---------+-----------+---------------+
| code_no | cntc_type | cntc_data     |
+---------+-----------+---------------+
|    1001 | Mobile    | 9999999999    |
|    1002 | Email     | abc@gmail.com |
+---------+-----------+---------------+
2 rows in set (0.00 sec)
```

List the employee details along with contact details using left outer join & right join

```
mysql> -- List the employee details along with contact details using left outer join & right join
mysql> SELECT e.*,c.cntc_type,c.cntc_data
    -> FROM emp_mstr e
    -> LEFT JOIN cntc_dets c ON e.emp_no=c.code_no;
+--------+---------+--------+--------+------+-----------+-----------+-----------+---------------+
| emp_no | f_name  | l_name | m_name | dept | desg      | branch_no | cntc_type | cntc_data     |
+--------+---------+--------+--------+------+-----------+-----------+-----------+---------------+
|   1001 | Ravi    | Patil  | A      | IT   | Manager   |        11 | Mobile    | 9999999999    |
|   1002 | Sarthak | Joshi  | B      | HR   | Executive |        12 | Email     | abc@gmail.com |
+--------+---------+--------+--------+------+-----------+-----------+-----------+---------------+
2 rows in set (0.00 sec)
```

5. Create following Tables cust_mstr(cust_no,fname,lname) add_dets(code_no,pincode)

```
mysql> CREATE TABLE branch (
    ->   branch_id INT PRIMARY KEY,
    ->   pincode VARCHAR(10)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO branch VALUES (1,'411044');
Query OK, 1 row affected (0.01 sec)

mysql> select * from branch;
+-----------+---------+
| branch_id | pincode |
+-----------+---------+
|         1 | 411044  |
+-----------+---------+
1 row in set (0.00 sec)
```

List the customer who do not have bank branches in their vicinity.

```
mysql> -- List the customer who do not have bank branches in their vicinity.
mysql> SELECT c.cust_no,c.fname,c.lname
    -> FROM cust_mstr c
    -> JOIN add_dets a ON c.cust_no=a.code_no
    -> WHERE a.pincode NOT IN (SELECT pincode FROM branch);
+---------+-------+-------+
| cust_no | fname | lname |
+---------+-------+-------+
|       2 | rahul | singh |
+---------+-------+-------+
1 row in set (0.01 sec)
```

Borrower table and depositor table created:

```
mysql> CREATE TABLE borrower (
    ->   cust_name VARCHAR(50),
    ->   loan_no INT
    -> );
Query OK, 0 rows affected (0.02 sec)

mysql> INSERT INTO borrower VALUES ('Mayuri',201);
Query OK, 1 row affected (0.01 sec)

mysql> select * from borrower;
+-----------+---------+
| cust_name | loan_no |
+-----------+---------+
| Mayuri    |     201 |
+-----------+---------+
1 row in set (0.00 sec)

mysql> CREATE TABLE depositor (
    ->   cust_name VARCHAR(50),
    ->   acc_no INT
    -> );
Query OK, 0 rows affected (0.03 sec)
```

6. a) Create View on borrower table by selecting any two columns and perform insert update delete Operations
b) Create view on borrower and depositor table by selecting any one column from each table perform insert update delete operations
c) create updateable view on borrower table by selecting any two columns and perform insert update delete operations.

```
mysql> CREATE VIEW borrower_view AS
    -> SELECT cust_name,loan_no FROM borrower;
Query OK, 0 rows affected (0.01 sec)

mysql> select * from borrower_view;
+-----------+---------+
| cust_name | loan_no |
+-----------+---------+
| Mayuri    |     201 |
+-----------+---------+
1 row in set (0.01 sec)

mysql> INSERT INTO borrower_view VALUES ('Sudhir',202);
Query OK, 1 row affected (0.01 sec)

mysql> UPDATE borrower_view SET loan_no=203 WHERE cust_name='Sudhir';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> DELETE FROM borrower_view WHERE cust_name='Mayuri';
Query OK, 1 row affected (0.01 sec)

mysql> select *from borrower_view;
+-----------+---------+
| cust_name | loan_no |
+-----------+---------+
| Sudhir    |     203 |
+-----------+---------+
1 row in set (0.00 sec)

mysql> -- View joining borrower & depositor
mysql> CREATE VIEW borrow_deposit_view AS
    -> SELECT b.cust_name,d.acc_no FROM borrower b JOIN depositor d ON b.cust_name=d.cust_name;
Query OK, 0 rows affected (0.01 sec)

mysql> select *from borrow_deposit_view;
Empty set (0.00 sec)

mysql> select * from borrow_deposit_view;
Empty set (0.00 sec)
```