

/*EXPERIMENT NO.5 : AGGREGATE FUNCTIONS*/

/*1.List total loan*/

SELECT SUM (AMOUNT) FROM BORROW;

/*2.List total deposit*/

SELECT SUM (AMOUNT) FROM DEPOSIT;

/*3.List total loan taken from KAROLBAGH branch*/

SELECT MAX(AMOUNT) FROM BORROW WHERE BNAME ='KAROLBAGH';

/* 4.List total deposit of customers having account date later than 1-Jan-96*/

SELECT SUM(AMOUNT) from deposit where adate>'1995-03-01';

/* 5.List total deposit of customers living in city NAGPUR*/

SELECT SUM(D1.AMOUNT) FROM DEPOSIT D1 , CUSTOMER C1 WHERE C1.CITY = 'NAGPUR' AND
C1.CNAME = D1.CNAME;

/*6.List maximum deposit of customer living in Bombay*/

SELECT MAX(D1.AMOUNT) FROM DEPOSIT D1 , CUSTOMER C1 WHERE C1.CITY = 'Bombay' AND
C1.CNAME = D1.CNAME;

/* 7.List total deposit of customer having branch in BOMBAY*/

SELECT SUM (AMOUNT) from deposit,BRANCH where city='BOMBAY';

/* 8.Count total number of branch cities*/

SELECT COUNT(DISTINCT (CITY)) FROM BRANCH ;

/*9.Count total number of customers cities*/

```
SELECT count(city) from CUSTOMER;
```

/* 10.Give branch names and branch wise deposit*/

```
SELECT BNAME , SUM(AMOUNT) FROM DEPOSIT GROUP BY BNAME;
```

/*11.Give city wise name and branch wise deposit*/

```
SELECT C1.CITY , SUM(D1.AMOUNT) FROM CUSTOMER C1 , DEPOSIT D1 WHERE D1.CNAME =  
C1.CNAME GROUP BY C1.CITY;
```

/*12.Give the branch wise loan of customer living in NAGPUR*/

```
SELECT BNAME , SUM(AMOUNT) FROM BORROW,CUSTOMER WHERE city ='NAGPUR' GROUP BY  
BNAME;
```

/*13.Count total number of customers*/

```
SELECT count(cname) from CUSTOMER;
```

/*14.Count total number of depositors branch wise*/

```
SELECT BName, count (*)from DEPOSIT, CUSTOMER where deposit.CNAME = CUSTOMER.CNAME  
group by BNAME
```

/*15.Count total number of depositors branch wise*/

```
SELECT BName, count (*)from DEPOSIT, CUSTOMER where deposit.CNAME = CUSTOMER.CNAME  
group by BNAME
```

/*16.Give maximum loan from branch VRCE*/

```
SELECT MAX(AMOUNT) FROM BORROW WHERE BNAME ='VRCE';
```

/*17.Give the number of customers who are depositors as well as borrowers*

```
SELECT COUNT(DISTINCT (CNAME)) FROM CUSTOMER WHERE CNAME IN ((SELECT CNAME FROM DEPOSIT) INTERSECT (SELECT CNAME FROM BORROW));
```

/*EXPERIMENT NO.6 : SET OPERATIONS*/

/*1. List all the customers who are depositors but not borrowers.*/

```
SELECT CNAME FROM DEPOSIT MINUS SELECT CNAME FROM BORROW;
```

/*2. List all the customers who are both depositors and borrowers*/

```
SELECT CNAME FROM DEPOSIT UNION (SELECT CNAME FROM BORROW);
```

/*3. List all the depositors having deposit in all the branches where Sunil is having Account*/

```
SELECT D1.CNAME FROM DEPOSIT D1 WHERE D1.BNAME IN (SELECT D2.BNAME FROM DEPOSIT D2 WHERE D2.CNAME = 'SUNIL');
```

/*4. List all the customers living in city NAGPUR and having branch city BOMBAY or DELHI*/

```
SELECT C1.CNAME FROM CUSTOMER C1,DEPOSIT D1, BRANCH B1 WHERE C1.CITY = 'NAGPUR' AND C1.CNAME = D1.CNAME AND D1.BNAME = B1.BNAME AND B1.CITY IN ('BOMBAY','DELHI');
```

/*5. List all the depositors living in city NAGPUR*/

```
SELECT Distinct(CUSTOMER.CNAME) from CUSTOMER,DEPOSIT WHERE City='NAGPUR';
```

/*6. List all the depositors living in the city NAGPUR and having branch in city BOMBAY*/

```
SELECT C1.CNAME FROM CUSTOMER C1,DEPOSIT D1, BRANCH B1 WHERE C1.CITY = 'NAGPUR' AND C1.CNAME = D1.CNAME AND D1.BNAME = B1.BNAME AND B1.CITY IN ('BOMBAY');
```

/*7. List the branch cities of Anil and Sunil*/

```
SELECT B1.CITY FROM DEPOSIT D1, BRANCH B1 WHERE D1.BNAME = B1.BNAME AND D1.CNAME IN ('SUNIL','ANIL');
```

/*11. List all the cities where branches of Anil and Sunil are locate*/

```
SELECT B1.CITY FROM BRANCH B1 WHERE B1.BNAME IN (SELECT D1.BNAME FROM DEPOSIT D1
WHERE D1.CNAME IN ('ANIL','SUNIL'));
```

/*EXPERIMENT NO.7 : JOIN OR CARTESIAN PRODUCT*/

/*1.Give name of customers having living city BOMBAY and branch city NAGPUR*/

```
SELECT D1.CNAME,D1.BNAME,C1.CNAME,C1.CITY,B1.CITY,B1.BNAME FROM DEPOSIT D1,CUSTOMER
C1,BRANCH B1 WHERE C1.CITY = 'BOMBAY' AND B1.CITY = 'NAGPUR' AND D1.CNAME = C1.CNAME
AND D1.BNAME = B1.BNAME;
```

/*2.Give names of customers having the same living city as their branch city*/

```
SELECT distinct(customer.CNAME), BRANCH.CITY FROM BRANCH, customer WHERE BRANCH.city =
customer.city;
```

/*3.Give names of customers who are borrowers as well as depositors and having city NAGPUR.*/

```
SELECT C1.CNAME FROM CUSTOMER C1,DEPOSIT D1,BORROW B1 WHERE C1.CITY='NAGPUR' AND
C1.CNAME=D1.CNAME AND D1.CNAME = B1.CNAME;
```

/*4.Give names of borrowers having deposit amount greater than 1000 and loan amount greater than 2000.*/

```
SELECT BR1.CNAME, BR1.AMOUNT, D1.CNAME, D1.AMOUNT FROM BORROW BR1,DEPOSIT D1
WHERE D1.CNAME = BR1.CNAME AND D1.AMOUNT > 1000 AND BR1.AMOUNT > 2000;
```

/*5.Give names of depositors having the same branch as the branch of Sunil*/

```
SELECT D1.CNAME FROM DEPOSIT D1 WHERE D1.BNAME IN (SELECT D2.BNAME FROM DEPOSIT D2
WHERE D2.CNAME = 'SUNIL');
```

/*6.Give names of borrowers having loan amount greater than the loan amount of Pramod*/

```
SELECT BR1.CNAME,BR1.AMOUNT FROM BORROW BR1 WHERE BR1.AMOUNT > ALL (SELECT  
BR2.AMOUNT FROM BORROW BR2 WHERE BR2.CNAME = 'PRAMOD');
```

/*7.Give the name of the customer living in the city where branch of depositor Sunil is located.*/

```
SELECT C.CNAME FROM CUSTOMER C WHERE C.CITY IN (SELECT B.CITY FROM BRANCH B WHERE  
B.BNAME IN (SELECT D.BNAME FROM DEPOSIT D WHERE D.CNAME='SUNIL'));
```

/*8.Give branch city and living city of Pramod*/

```
SELECT B1.CITY , C1.CITY FROM BRANCH B1,CUSTOMER C1, DEPOSIT D1 WHERE C1.CNAME =  
'PRAMOD' AND C1.CNAME = D1.CNAME AND D1.BNAME = B1.BNAME;
```

/*9.Give branch city of Sunil and branch city of Anil*/

```
SELECT B1.CITY FROM DEPOSIT D1, BRANCH B1 WHERE D1.BNAME = B1.BNAME AND D1.CNAME IN  
('SUNIL' ,'ANIL');
```

/*10.Give the living city of Anil and the living city of Sunil*/

```
SELECT C1.CNAME, C1.CITY FROM CUSTOMER C1 WHERE C1.CNAME = 'ANIL' OR C1.CNAME =  
'SUNIL';
```
