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'));

OUTPUT

```
SUNIL
MADHURI
PRAMOD
NAGFUR
NAGFUR
NAGPUR

...Program finished with exit code 1
Press ENTER to exit console.
```

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';

OUTPUT

```
RRANTI|BOMBAY
MADHURI|NAGFUR
NAREN|BOMBAY
PRAMOD|NAGFUR
SHIVANI|BOMBAY
SUNIL|DELHI
MADHURI
PRAMOD
MEHUL|5000.0|MEHUL|3500.0
PRAMOD|8000.0|PRAMOD|3000.0
KRANTI|3000.0|KRANTI|5000.0
SUNIL
Error: near line 44: near "ALL": syntax error
BanGALORE|NAGFUR
NAGFUR
ANIL|CALCUTTA
SUNIL|DELHI

...Program finished with exit code 1
Press ENTER to exit console.
```