SUJITH RAMAN S

S2 RMCA B

ROLL NO: 27

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));

OUTPUT

```
24200.0
11500.0
4200.0
48400.0
ANDHERI|2000.0
ANJNI|500.0
CHANDNI|1200.0
KAROLBAGH|3500.0
MG ROAD|3000.0
NEHRU PLACE|5000.0
POWAI|7000.0
VIRAR|1000.0
VRCE|1000.0
BARODA|3500.0
BOMBAY|6000.0
CALCUTTA|1000.0
DELHI|500.0
NAGPUR|4200.0
AJNI|10000.0
ANDHERI|4000.0
DHARAMPETH|6000.0
NEHRU PLACE | 6000.0
VIRAR|16000.0
VRCE|2000.0
```

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
MADHURI
PRAMOD
NAGPUR
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

```
KRANTI|BOMBAY
MADHURI | NAGPUR
NAREN | BOMBAY
PRAMOD | NAGPUR
SHIVANI | BOMBAY
SUNIL | DELHI
MADHURI
PRAMOD
MEHUL|5000.0|MEHUL|3500.0
PRAMOD|8000.0|PRAMOD|3000.0
KRANTI|3000.0|KRANTI|5000.0
Error: near line 44: near "ALL": syntax error
BANGALORE | NAGPUR
NAGPUR
ANIL | CALCUTTA
SUNIL | DELHI
...Program finished with exit code 1
Press ENTER to exit console.
```