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';