

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';
```


