

## Experiment – 7

### Aim:

Write the queries to implement the subqueries.

**Tool Used:** MariaDB.

### Queries:

**Query-1:** Find the customers who live in the same city as the branch they made a deposit.

```
MariaDB [BANK]> SELECT CNAME FROM CUSTOMERS WHERE CITY = (SELECT CITY FROM BRANCH WHERE  
BNAME = (SELECT BNAME FROM DEPOSIT WHERE CNAME = CUSTOMERS.CNAME));
```

CNAME
ANIL
SHIVANI

**Query-2:** Retrieve the customers who have made a deposit greater than the average deposit amount.

```
MariaDB [BANK]> SELECT CNAME FROM DEPOSIT WHERE AMOUNT > (SELECT AVG(AMOUNT) FROM DEPOSIT);
```

CNAME
ANIL
SUNIL
MEHUL

**Query-3:** Get the branches where the total amount borrowed is more than the average amount borrowed.

```
MariaDB [BANK]> SELECT BNAME FROM BORROW WHERE AMOUNT > (SELECT AVG(AMOUNT) FROM BORROW);
```

BNAME
AJNI
VIRAR

**Query-4:** Find the customers who have not made any deposits.

```
MariaDB [BANK]> SELECT CNAME FROM CUSTOMERS WHERE CNAME NOT IN (SELECT DISTINCT CNAME  
FROM DEPOSIT);
```

CNAME
MANDAR
NAREN

**Query-5:** Retrieve the branches where no customers have borrowed any amount.

```
MariaDB [BANK]> SELECT BNAME FROM BRANCH WHERE BNAME NOT IN (SELECT DISTINCT BNAME
FROM BORROW);
```

BNAME
KAROLBAGH
CHANDNI
M.G.ROAD
POWAI

**Query-6:** Get the customers who have made deposits in all branches.

```
MariaDB [BANK]> SELECT CNAME FROM CUSTOMERS WHERE (SELECT COUNT(DISTINCT BNAME
) FROM DEPOSIT WHERE DEPOSIT.CNAME = CUSTOMERS.CNAME) = (SELECT COUNT(DISTINCT
BNAME) FROM BRANCH);
Empty set (0.004 sec)
```

**Query-7:** Find the branches where the total amount borrowed is greater than the total amount deposited.

```
MariaDB [BANK]> SELECT BNAME FROM (SELECT BNAME, SUM(AMOUNT) AS TOTAL_BORROWED
FROM BORROW GROUP BY BNAME) AS B WHERE B.TOTAL_BORROWED > (SELECT COALESCE(SU
M(AMOUNT), 0) FROM DEPOSIT WHERE BNAME = B.BNAME GROUP BY BNAME);
```

BNAME
NEHRU PLACE
VIRAR

**Query-8:** Retrieve the customers who have made a deposit at a branch located in their city of residence.

```
MariaDB [BANK]> SELECT CNAME FROM CUSTOMERS WHERE CNAME IN (SELECT D.CNAME FROM DEPOS
IT AS D INNER JOIN BRANCH AS B ON D.BNAME = B.BNAME WHERE CUSTOMERS.CITY = B.CITY);
```

CNAME
ANIL
SHIVANI

**Query-9:** Get the branches where the average amount borrowed is greater than the average amount deposited.

```
MariaDB [BANK]> SELECT BNAME FROM (SELECT BNAME, AVG(AMOUNT) AS AVG_BORROWED FROM BOR
ROW GROUP BY BNAME) AS B WHERE B.AVG_BORROWED > (SELECT AVG(AMOUNT) FROM DEPOSIT);
```

BNAME
VIRAR

**Query-10:** Find the customers who have borrowed more than the highest deposit amount made at any branch.

```
MariaDB [BANK]> SELECT CNAME FROM BORROW WHERE AMOUNT > (SELECT MAX(AMOUNT) FROM DEPOSIT);
Empty set (0.000 sec)
```