Experiment – 5

Aim:

Write the DML commands for implementing GROUP BY, HAVING and ORDER BY.

GROUP BY and HAVING:

Query-1: List the branches having sum of deposit more than 5000.

```
MariaDB [BANK]> SELECT BNAME FROM DEPOSIT WHERE BNAME IN (SELECT BNAME FROM BRANCH
WHERE CITY = "BOMBAY") GROUP BY BNAME HAVING SUM(AMOUNT) > 5000;
+-------+
| BNAME |
+-------+
| POWAI |
+-------+
```

Query-2: List the branches having a sum of deposit more than 5000 and located in city Bombay.

```
MariaDB [bank]> SELECT BNAME,AMOUNT FROM DEPOSIT GROUP BY BNAME HAVING SUM(AMOUNT) > 5000;
+-----------+--------+
| BNAME     | AMOUNT |
+-----------+--------+
| AJNI      |  12200 |
| KAROLBAGH |   8800 |
| POWAI     |   5500 |
| VRCE      |  21000 |
+-----------+--------+
```

Query-3: List the names of customers having deposit in the branches where the average deposit is more than 5000.

```
MariaDB [BANK]> SELECT CNAME,BNAME FROM DEPOSIT WHERE BNAME IN (SELECT BNAME FROM DEPOSIT GROUP
BY BNAME HAVING AVG(AMOUNT) > 5000);
+-------+-----------+
| CNAME | BNAME     |
+-------+-----------+
| ANIL  | VRCE      |
| SUNIL | AJNI      |
| MEHUL | KAROLBAGH |
| MINU  | POWAI     |
+-------+-----------+
```

Query-4: List the names of customers having maximum deposit.

```
MariaDB [BANK]> SELECT BNAME FROM DEPOSIT GROUP BY BNAME HAVING COUNT(DISTINCT CNAME) =
 (SELECT MAX(DepositorsCount) FROM (SELECT COUNT(DISTINCT CNAME) AS DepositorsCount FRO
M DEPOSIT GROUP BY BNAME) AS Subquery);
+-------+
| BNAME |
+-------+
| VIRAR |
+-------+
```

Query-5: List the names of customers having maximum deposit in the customers living in Nagpur.

```
MariaDB [BANK]> SELECT COUNT(CNAME) AS DepositorsCount FROM DEPOSIT WHERE CNAME IN (SEL
ECT CNAME FROM CUSTOMERS WHERE CITY = "NAGPUR");
+-----------------+
| DepositorsCount |
+-----------------+
|               3 |
+-----------------+
```

Query-6: List the name of branches having highest number of depositors.

```
MariaDB [BANK]> SELECT BNAME FROM DEPOSIT GROUP BY BNAME HAVING COUNT(CNAME) > 5;
Empty set (0.001 sec)
```

Query-7: Count the number of depositors living in Nagpur.

```
MariaDB [BANK]> SELECT CNAME,AMOUNT FROM DEPOSIT WHERE BNAME = "VRCE" GROUP BY CNAME HA
VING AMOUNT > ALL (SELECT AMOUNT FROM DEPOSIT WHERE BNAME = "VRCE");
Empty set (0.001 sec)
```

Query-8: Give names of customers in VRCE branch having more deposit than all customers from same branch.

```
MariaDB [BANK]> SELECT CITY,COUNT(BNAME) FROM BRANCH GROUP BY CITY HAVING COUNT(*) = (SELECT M
AX(BranchCount) FROM (SELECT COUNT(*) AS BranchCount FROM BRANCH GROUP BY CITY) AS Subquery);
+--------+--------------+
| CITY   | COUNT(BNAME) |
+--------+--------------+
| DELHI  |            3 |
| NAGPUR |            3 |
+--------+--------------+
```

Query-9: Give name of branch where number of depositors is more than five.

```
MariaDB [BANK]> SELECT CNAME,AMOUNT FROM DEPOSIT WHERE AMOUNT = (SELECT MAX(AMOUNT)
 FROM DEPOSIT);
+-------+--------+
| CNAME | AMOUNT |
+-------+--------+
| ANIL  |  21000 |
+-------+--------+
```

Query-10: Give names of cities in which the maximum number of branches are located.

```
MariaDB [BANK]> SELECT CNAME,AMOUNT FROM DEPOSIT WHERE AMOUNT = (SELECT MAX(AMOUNT)
 FROM DEPOSIT WHERE CNAME IN (SELECT CNAME FROM CUSTOMERS WHERE CITY = "NAGPUR"));
+-------+--------+
| CNAME | AMOUNT |
+-------+--------+
| ANIL  |  21000 |
+-------+--------+
```

ORDER BY:

Query-1: List the branches according to their deposit amount in ascending order.

```
MariaDB [BANK]> SELECT BNAME,AMOUNT FROM DEPOSIT GROUP BY BNAME ORDER BY AMOUNT ASC;
+-------------+--------+
| BNAME       | AMOUNT |
+-------------+--------+
| VIRAR       |   1100 |
| ANDHERI     |   2200 |
| NEHRU PLACE |   3300 |
| M.G.ROAD    |   4525 |
| CHANDNI     |   4525 |
| POWAI       |   5500 |
| KAROLBAGH   |   8800 |
| AJNI        |  12200 |
| VRCE        |  21000 |
+-------------+--------+
```

Query-2: List the customers according to their loan amount in descending order.

```
MariaDB [BANK]> SELECT CNAME,AMOUNT FROM BORROW GROUP BY CNAME ORDER BY AMOUNT DESC;
+---------+--------+
| CNAME   | AMOUNT |
+---------+--------+
| PRAMOD  |   8000 |
| MEHUL   |   5000 |
| KRANTI  |   3600 |
| SUNIL   |   3000 |
| MADHURI |   2000 |
| ANIL    |   1000 |
+---------+--------+
```