Zeal College of Engineering and Research

Subject: DBMSL

Name: Jenil Girish Rathod Class: TE

Div: B Batch: B1

Roll No: T212009

Group A: Practical No: 3

Program Statement:

SQL Queries - all types of Join, Sub-Query and View: a. Write at least 10 SQL queries for suitable database application using SQL DML statements. b. design the queries which demonstrate the use of concepts like all types of Join, Sub-Query

Code:

```
mysql> CREATE DATABASE SALE;
Query OK, 1 row affected (0.01 sec)

mysql> USE SALE;
Database changed

mysql> CREATE TABLE Customers (CustomerID INT PRIMARY KEY, CustomerName
VARCHAR(255), Country VARCHAR(255));

Query OK, 0 rows affected (0.03 sec)


mysql> CREATE TABLE Orders (OrderID INT PRIMARY KEY, OrderDate DATE,
CustomerID INT, Amount DECIMAL(10, 2), FOREIGN KEY (CustomerID)
REFERENCES Customers(CustomerID));

Query OK, 0 rows affected (0.08 sec)


mysql> INSERT INTO Customers (CustomerID, CustomerName, Country)
   -> VALUES
   -> (1, "Bhavik", "India"),
   -> (2, "Tanisha", "Singapore"),
   -> (3, "Delisha", "China"),
   -> (4, "Jenil", "Australia");

Query OK, 4 rows affected (0.00 sec)
```

```
Records: 4  Duplicates: 0  Warnings: 0


mysql> INSERT INTO Orders (OrderID, OrderDate, CustomerID, Amount)
    -> VALUES
    -> (101, '2023-09-12', 1, 250.00),
    -> (102, '2023-09-10', 2, 450.00),
    -> (103, '2023-09-15', 1, 150.00),
    -> (104, '2023-09-18', 4, 300.00),
    -> (105, '2023-09-20', 3, 200.00);

Query OK, 5 rows affected (0.02 sec)
Records: 5  Duplicates: 0  Warnings: 0


mysql> SELECT Customers.CustomerID, Customers.CustomerName, Orders.OrderID,
Orders.Amount FROM Customers INNER JOIN Orders ON Customers.CustomerID =
Orders.CustomerID;
+------------+--------------+---------+--------+
| CustomerID | CustomerName | OrderID | Amount |
+------------+--------------+---------+--------+
|          1 | Bhavik       |     101 | 250.00 |
|          1 | Bhavik       |     103 | 150.00 |
|          2 | Tanisha      |     102 | 450.00 |
|          3 | Delisha      |     105 | 200.00 |
|          4 | Jenil        |     104 | 300.00 |
+------------+--------------+---------+--------+

5 rows in set (0.02 sec)


mysql> SELECT Customers.CustomerID, Customers.CustomerName, Orders.OrderID,
Orders.Amount FROM Customers LEFT JOIN Orders ON Customers.CustomerID =
Orders.CustomerID;
+------------+--------------+---------+--------+
| CustomerID | CustomerName | OrderID | Amount |
+------------+--------------+---------+--------+
|          1 | Bhavik       |     101 | 250.00 |
|          1 | Bhavik       |     103 | 150.00 |
|          2 | Tanisha      |     102 | 450.00 |
|          3 | Delisha      |     105 | 200.00 |
|          4 | Jenil        |     104 | 300.00 |
+------------+--------------+---------+--------+

5 rows in set (0.01 sec)

mysql> SELECT Customers.CustomerID, Customers.CustomerName, Orders.OrderID,
Orders.Amount FROM Customers RIGHT JOIN Orders ON Customers.CustomerID =
Orders.CustomerID;
```

```
+------------+--------------+---------+--------+
| CustomerID | CustomerName | OrderID | Amount |
+------------+--------------+---------+--------+
|          1 | Bhavik       |     101 | 250.00 |
|          2 | Tanisha      |     102 | 450.00 |
|          1 | Bhavik       |     103 | 150.00 |
|          4 | Jenil        |     104 | 300.00 |
|          3 | Delisha      |     105 | 200.00 |
+------------+--------------+---------+--------+
```

5 rows in set (0.01 sec)

mysql> SELECT Customers.CustomerID, Customers.CustomerName, Orders.OrderID, Orders.Amount FROM Customers LEFT JOIN Orders ON Customers.CustomerID = Orders.CustomerID UNION SELECT Customers.CustomerID, Customers.CustomerName, Orders.OrderID, Orders.Amount FROM Customers RIGHT JOIN Orders ON Customers.CustomerID = Orders.CustomerID;

```
+------------+--------------+---------+--------+
| CustomerID | CustomerName | OrderID | Amount |
+------------+--------------+---------+--------+
|          1 | Bhavik       |     101 | 250.00 |
|          1 | Bhavik       |     103 | 150.00 |
|          2 | Tanisha      |     102 | 450.00 |
|          3 | Delisha      |     105 | 200.00 |
|          4 | Jenil        |     104 | 300.00 |
+------------+--------------+---------+--------+
```

5 rows in set (0.02 sec)