### **SQL** Assignment-4

### Q.1. Write a SQL query to show average number of orders shipped in a day (use Orders table).

#### Answer:

```
sql_command = """SELECT date(shippeddate), AVG(QuantityOrdered) AS
num_orders
FROM Orders, OrderDetails
WHERE OrderDetails.orderNo = Orders.orderNo
GROUP BY date(shippeddate);"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

```
('2004-10-19', 20.0)
('2012-10-11', 10.0)
('2012-10-15', 7.0)
('2022-10-10', 5.5)
('2022-10-11', 30.0)
```

#### Q. 2. Write a SQL query to show average number of orders placed in a day.

#### Answer:

```
sql_command = """SELECT date(orderdate), AVG(QuantityOrdered)
FROM Orders, OrderDetails
WHERE OrderDetails.orderNo = Orders.orderNo
GROUP BY date(orderdate);"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

```
('2004-10-19', 20.0)
('2012-10-10', 10.0)
('2012-10-12', 7.0)
('2022-10-10', 13.66666666666666)
```

# 3. Write a SQL query to show the product name with minimum MSRP (use Products table)

#### Answer:

```
sql_command = """SELECT ProductName, MIN(MSRP) FROM Products GROUP
BY MSRP;"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

```
('Mother Dairy Fresh Milk', 48)
('Amul Fresh Milk', 50)
('Pepsodent Toothpaste', 100)
('Surf Excel Detergent', 320)
('Bournvita Health Drinks', 420)
('Horlicks Health Drinks', 450)
```

### 4. Write a SQL query to show the product name with maximum value of stock Quantity.

#### Answer:

```
sql_command = """SELECT ProductName, MAX(QuantityInStock) FROM
Products GROUP BY QuantityInStock;"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

```
('Pepsodent Toothpaste', '1000 gms')
('Bournvita Health Drinks', '15 Kg')
('Horlicks Health Drinks', '20 Kg')
('Surf Excel Detergent', '30 Kg')
('Amul Fresh Milk', '50 ltr')
```

# 5. Write a query to show the most ordered product Name (the product with maximum number of orders).

#### **Answer:**

```
sql_command = """SELECT Products.ProductName,
SUM(OrderDetails.QuantityOrdered)
FROM OrderDetails
INNER JOIN Products
ON Products.ProductCode= OrderDetails.ProductCode
GROUP BY OrderDetails.QuantityOrdered
ORDER BY SUM(OrderDetails.QuantityOrdered) DESC;"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

```
('Mother Dairy Fresh Milk', 30)
('Amul Fresh Milk', 20)
('Surf Excel Detergent', 10)
('Pepsodent Toothpaste', 7)
('Horlicks Health Drinks', 6)
('Bournvita Health Drinks', 5)
```

#### 6. Write a SQL query to show the highest paying customer Name.

#### **Answer:**

```
sql_command = """SELECT CustomerName , MAX(Amount) AS Amount
FROM Customers, Payment
WHERE Customers.CustomerNo= Payment.CustomerNo
GROUP BY CustomerName
ORDER BY MAX(Amount) DESC;"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

```
('Nick Jones', 80000)
('Rick Wills', 55000)
('Nitin Juneja', 30000)
('Joe Jacobs', 25000)
('John Edward', 10000)
```

7. Write a SQL query to show cutomerNumber, customerName of all the customers who are from Melbourne city.

#### **Answer:**

```
sql_command = """SELECT CustomerNo, CustomerName FROM Customers
WHERE City = "Melbourne";"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

(14, 'James Schulman')

8. Write a SQL query to show name of all the customers whose name start with "N".

#### **Answer:**

```
sql_command = """SELECT CustomerName FROM Customers
WHERE CustomerName LIKE "N%";"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

```
('Nitin Juneja',)
('Nick Jones',)
('Neena Jacobs',)
```

9. Write a SQL query to show name of all the customers whose phone start with '7' and are from city 'Las Vegas'.

#### **Answer:**

```
sql_command = """SELECT CustomerName, Phone, City FROM Customers
WHERE Phone LIKE "7%" and City = "Las Vegas";"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

('Neena Jacobs', 777777777, 'Las Vegas')

10. Write a SQL query to show name of all the customers whose creditLimit < 1000 and city is either "Las Vegas" or "Nantes" or "Stavern".

#### **Answer:**

```
sql_command = """SELECT CustomerName, CreditLimit, City FROM Customers
WHERE CreditLimit < 1000 AND City ="Las Vegas" OR City ="Nantes" OR City =
"Stavern";"""
select= cursor.execute(sql_command)
for i in select:
    print(i)</pre>
```

```
('Nitin Juneja', 12000, 'Nantes')
('Rick Wills', 3000, 'Stavern')
('Mark Schulman', 200000, 'Stavern')
('Don Jones', 40000, 'Nantes')
('Maria Elliott', 14000, 'Stavern')
('Tanya Aldrich', 250000, 'Nantes')
```

### 11. Write a SQL query to show all the orderNumber in which quantity ordered <10.

#### Answer:

```
sql_command = """SELECT orderNo, QuantityOrdered FROM OrderDetails
WHERE QuantityOrdered < 10;"""
select= cursor.execute(sql_command)
for i in select:
    print(i)</pre>
```

### 12. Write a SQL query to show all the orderNumber whose customer Name start with letter 'N'.

#### **Answer:**

```
sql_command = """SELECT Orders.orderNo, Customers.CustomerName FROM
Orders, Customers
ON Orders.CustomerNo = Customers.CustomerNo
WHERE Customers.CustomerName LIKE "N%";"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### <u>OUTPUT</u>

```
(2, 'Nitin Juneja')(5, 'Nick Jones')(8, 'Neena Jacobs')
```

# 13. Write a SQL query to show all the customerName whose orders are "Disputed" in status.

#### **Answer:**

```
sql_command = """SELECT CustomerName, status
FROM Customers, Orders
ON Orders.CustomerNo = Customers.CustomerNo
WHERE status= "Disputed";"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

```
('Neena Jacobs', 'Disputed')
('Ed Gagliardi', 'Disputed')
```

14. Write a SQL query to show the customerName who made payment through cheque with checkNumber starting with H and made payment on "2004-10-19".

#### **Answer:**

```
sql_command = """SELECT CustomerName, ChequeNo, PaymentDate
FROM Customers
INNER JOIN Payment
ON Customers.CustomerNo = Payment.CustomerNo
WHERE Payment.ChequeNo LIKE "H%" AND Payment.PaymentDate= "2004-10-19";"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

#### **OUTPUT**

('Joe Jacobs', 'H65544', '2004-10-19')

15. Write a SQL query to show all the checkNumber whose amount > 1000

#### **Answer:**

```
sql_command = """SELECT ChequeNo, Amount FROM Payment
WHERE Amount>1000;"""
select= cursor.execute(sql_command)
for i in select:
    print(i)
```

```
('H00025', 10000)
('S56854', 30000)
('B56584', 55000)
('H65544', 25000)
('S00054', 80000)
```