ELECTRONIC GADGETS

Task 4. Subquery and its type:

1. Write an SQL query to find out which customers have not placed any orders.

```
SELECT *
FROM Customers
WHERE CustomerID NOT IN (SELECT DISTINCT CustomerID FROM Orders);
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

CustomerID	FirstName	LastName	Email	Phone	Address	OrderCount
4	Clara	Brown	clara.b@example.com	4445556666	147 Birch St	1
5	David	White	david.w@example.com	3332221111	369 Cedar St	0
11	Michael	Jordan	michael.jordan@example.com	9997776665	23 Basketball St	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL

2. Write an SQL query to find the total number of products available for sale.

```
SELECT COUNT(*) AS TotalProducts FROM Products;
```

Result Grid

TotalProducts
11

3. Write an SQL query to calculate the total revenue generated by TechShop.

```
SELECT SUM(TotalAmount) AS TotalRevenue FROM Orders;
```

Result Grid

TotalRevenue
3740.00

4. Write an SQL query to calculate the average quantity ordered for products in a specific category. Allow users to input the category name as a parameter.

```
SELECT AVG(od.Quantity) AS AvgQuantityOrdered
FROM OrderDetails od
JOIN Products p ON od.ProductID = p.ProductID
WHERE p.Description LIKE '%laptop%';
```

Result Grid | Filter

AvgQuantityOrdered
1.0000

5. Write an SQL query to calculate the total revenue generated by a specific customer. Allow users to input the customer ID as a parameter.

```
SELECT SUM(O.TotalAmount) AS CustomerTotalRevenue
FROM Orders O
WHERE O.CustomerID = 1;
```

Result Grid | Filter Rows:

	CustomerTotalRevenue
▶	1650.00

6. Write an SQL query to find the customers who have placed the most orders. List their names and the number of orders they've placed.

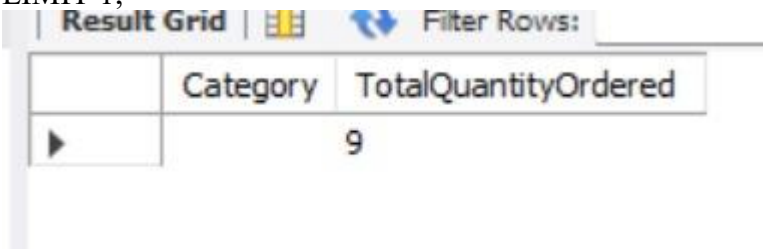
```
SELECT C.CustomerID, C.FirstName, C.LastName, COUNT(O.OrderID) AS
OrderCount
FROM Customers C
JOIN Orders O ON C.CustomerID = O.CustomerID
GROUP BY C.CustomerID
ORDER BY OrderCount DESC
LIMIT 1;
```

Result Grid | Filter Rows: | Expo

	CustomerID	FirstName	LastName	OrderCount
▶	3	Bob	Johnson	2

7. Write an SQL query to find the most popular product category, which is the one with the highest total quantity ordered across all orders.

```
SELECT P.Category, SUM(OD.Quantity) AS TotalQuantityOrdered
FROM OrderDetails OD
JOIN Products P ON OD.ProductID = P.ProductID
GROUP BY P.Category
ORDER BY TotalQuantityOrdered DESC
LIMIT 1;
```



Result Grid | Filter Rows:

	Category	TotalQuantityOrdered
▶		9

8. Write an SQL query to find the customer who has spent the most money (highest total revenue) on electronic gadgets. List their name and total spending.

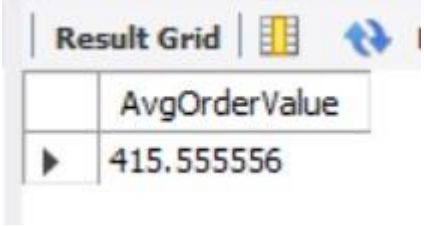
```
SELECT C.CustomerID, C.FirstName, C.LastName, SUM(O.TotalAmount) AS
TotalSpent
FROM Customers C
JOIN Orders O ON C.CustomerID = O.CustomerID
GROUP BY C.CustomerID
ORDER BY TotalSpent DESC
LIMIT 1;
```

Result Grid | Filter Rows: | Exp

CustomerID	FirstName	LastName	TotalSpent
1	John	Doe	1650.00

9. Write an SQL query to calculate the average order value (total revenue divided by the number of orders) for all customers.

```
SELECT AVG(O.TotalAmount) AS AvgOrderValue FROM Orders O;
```

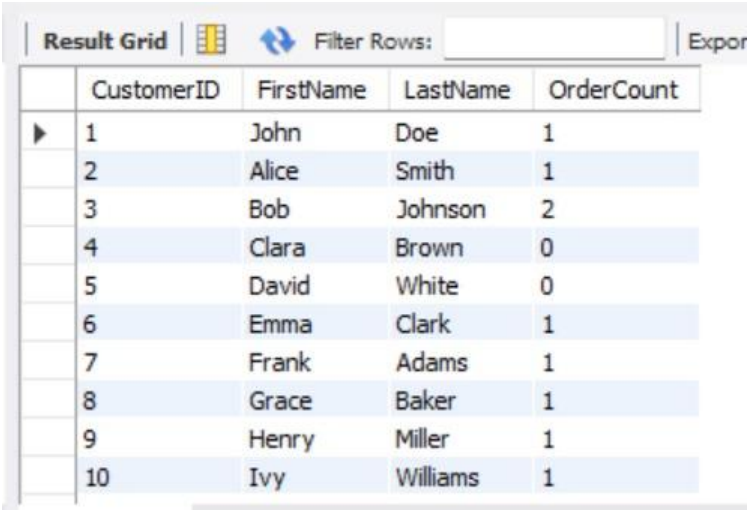


Result Grid |

AvgOrderValue
415.555556

10. Write an SQL query to find the total number of orders placed by each customer and list their names along with the order count.

```
SELECT C.CustomerID, C.FirstName, C.LastName, COUNT(O.OrderID) AS
OrderCount
FROM Customers C
LEFT JOIN Orders O ON C.CustomerID = O.CustomerID
GROUP BY C.CustomerID;
```



Result Grid | Filter Rows: | Expor

CustomerID	FirstName	LastName	OrderCount
1	John	Doe	1
2	Alice	Smith	1
3	Bob	Johnson	2
4	Clara	Brown	0
5	David	White	0
6	Emma	Clark	1
7	Frank	Adams	1
8	Grace	Baker	1
9	Henry	Miller	1
10	Ivy	Williams	1