SQL

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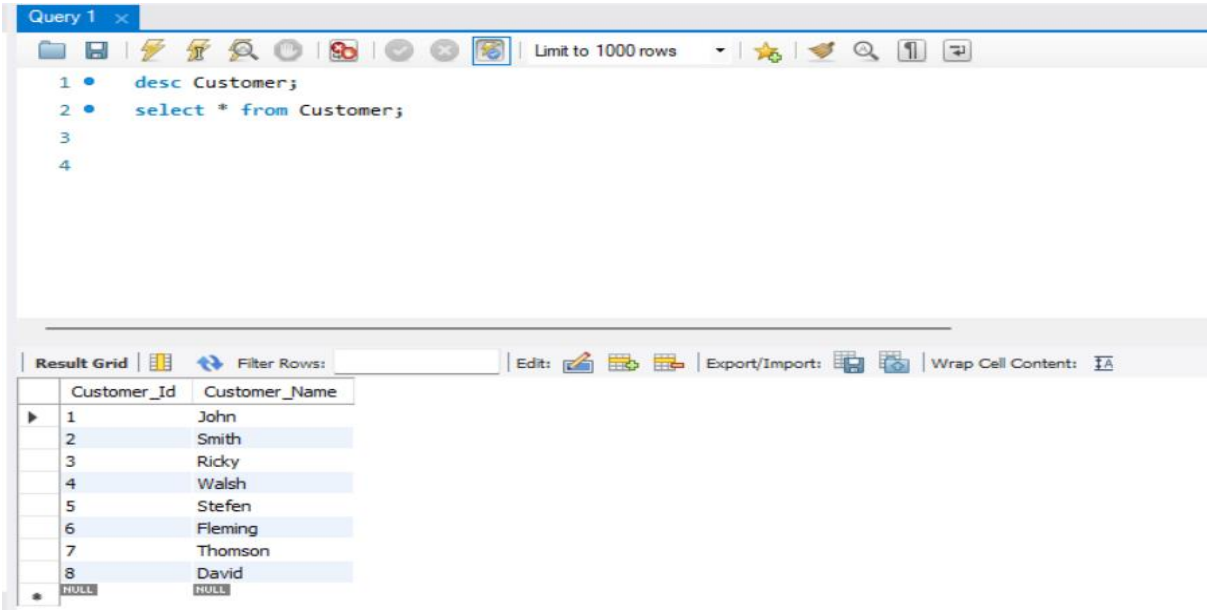
College:MRIT

Create Customer table..

CREATE TABLE Customer (Customer_Id INT PRIMARY KEY,Customer_Name VARCHAR(50));

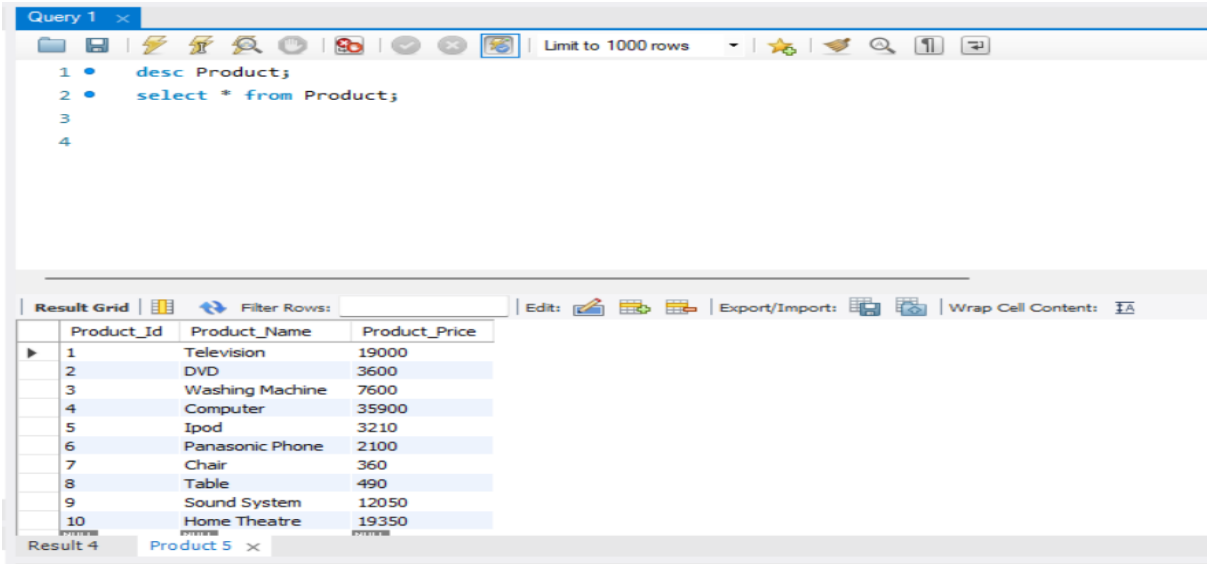
INSERT INTO Customer (Customer_Id, Customer_Name) VALUES(1, 'John'),(2, 'Smith'),(3, 'Ricky'),(4, 'Walsh'),(5, 'Stefen'),(6, 'Fleming'),(7, 'Thomson'),(8, 'David');



Create Product table..

CREATE TABLE Product(Product_Id INT PRIMARYKEY,Product_Name VARCHAR(50),Product_PriceINT);

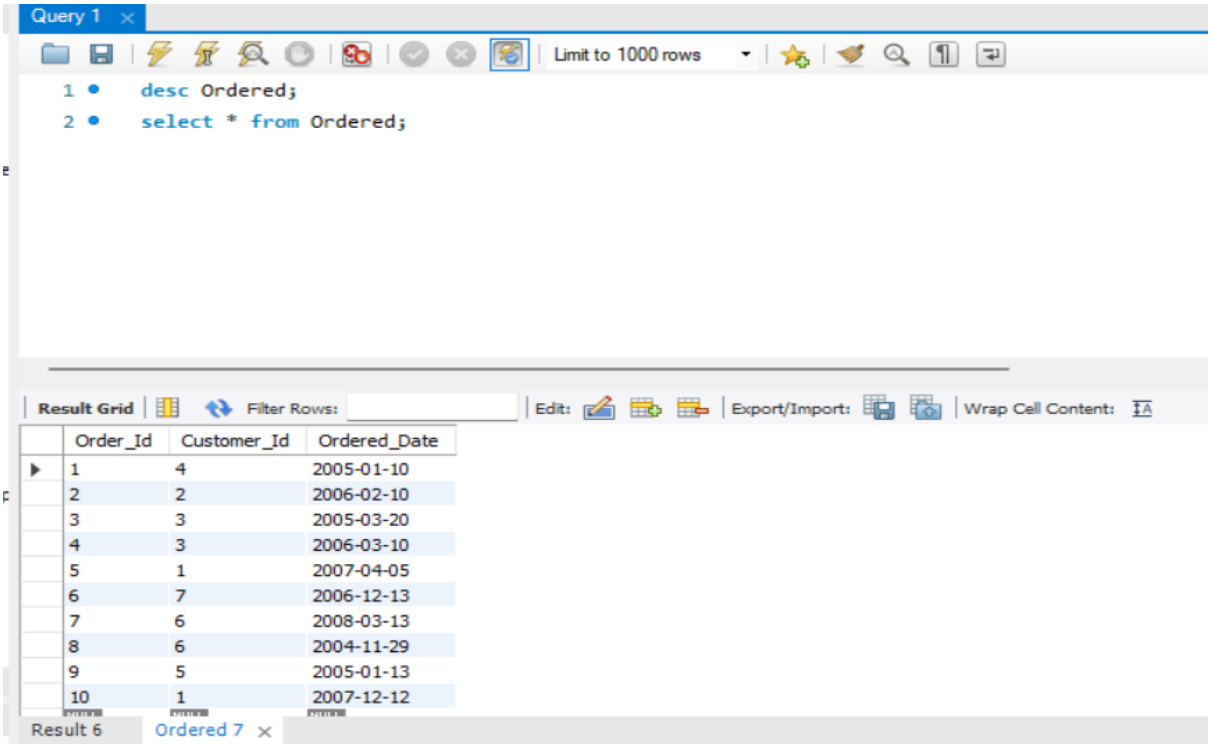
INSERT INTO Product (Product_Id, Product_Name, Product_Price) VALUES(1, 'Television', 19000),(2, 'DVD', 3600),(3, 'Washing Machine', 7600),(4, 'Computer', 35900),(5, 'Ipod', 3210),(6, 'Panasonic Phone', 2100),(7, 'Chair', 360),(8, 'Table', 490),(9, 'Sound System', 12050),(10, 'Home Theatre', 19350);



Create Ordered table..

CREATE TABLE Ordered (Order_Id INT PRIMARY KEY,Customer_Id INT,Ordered_Date DATE,FOREIGN KEY (Customer_Id) REFERENCES Customer(Customer_Id));

INSERT INTO Ordered (Order_Id, Customer_Id, Ordered_Date) VALUES(1, 4, '2005-01-10'),(2, 2, '2006-02-10'),(3, 3, '2005-03-20'),(4, 3, '2006-03-10'),(5, 1, '2007-04-05'),(6, 7, '2006-12-13'),(7, 6, '2008-03-13'),(8, 6, '2004-11-29'),(9, 5, '2005-01-13'),(10, 1, '2007-12-12');

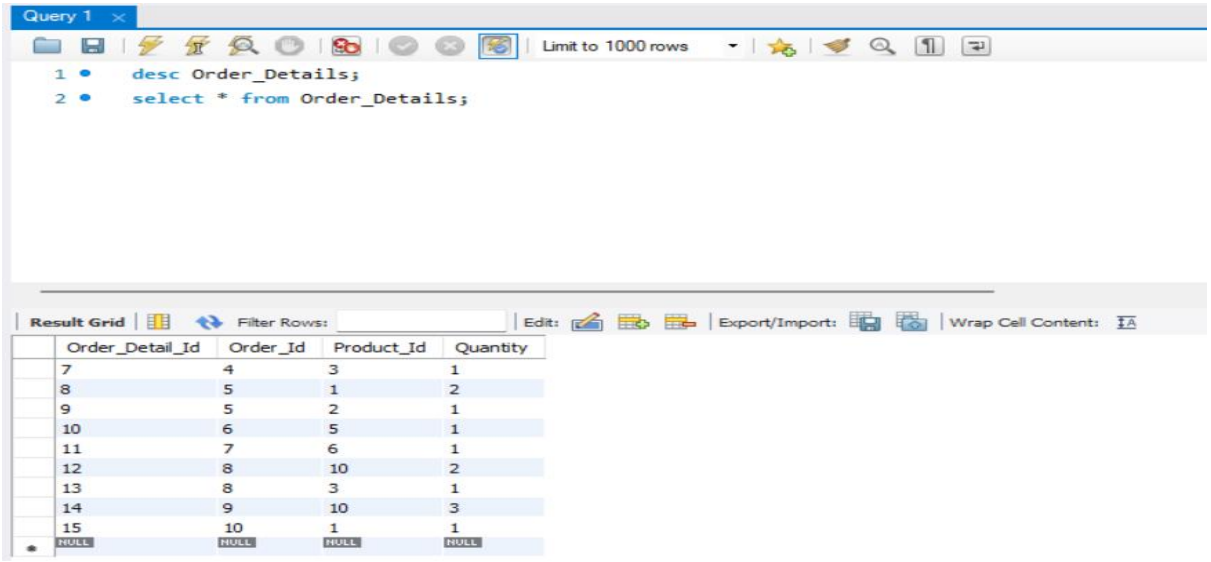


Create Order_Details table..

CREATE TABLE Order_Details (Order_Detail_Id INT PRIMARY KEY,Order_Id INT,Product_Id INT,Quantity INT,FOREIGN KEY (Order_Id) REFERENCES Ordered(Order_Id),FOREIGN KEY (Product_Id) REFERENCES Product(Product_Id));

INSERT INTO Order_Details (Order_Detail_Id, Order_Id, Product_Id, Quantity) VALUES(1, 1, 3, 1),

(2, 1, 2, 3),(3, 2, 10, 2),(4, 3, 7, 10),(5, 3, 4, 2),(6, 3, 5, 4),(7, 4, 3, 1),(8, 5, 1, 2),(9, 5, 2, 1),(10, 6, 5, 1),(11, 7, 6, 1),(12, 8, 10, 2),(13, 8, 3, 1),(14, 9, 10, 3),(15, 10, 1, 1);



Order_Detail_Id	Order_Id	Product_Id	Quantity
7	4	3	1
8	5	1	2
9	5	2	1
10	6	5	1
11	7	6	1
12	8	10	2
13	8	3	1
14	9	10	3
15	10	1	1
NULL	NULL	NULL	NULL

QUERIES:

1. Fetch all the Customer Details along with the product names that the customer has ordered.

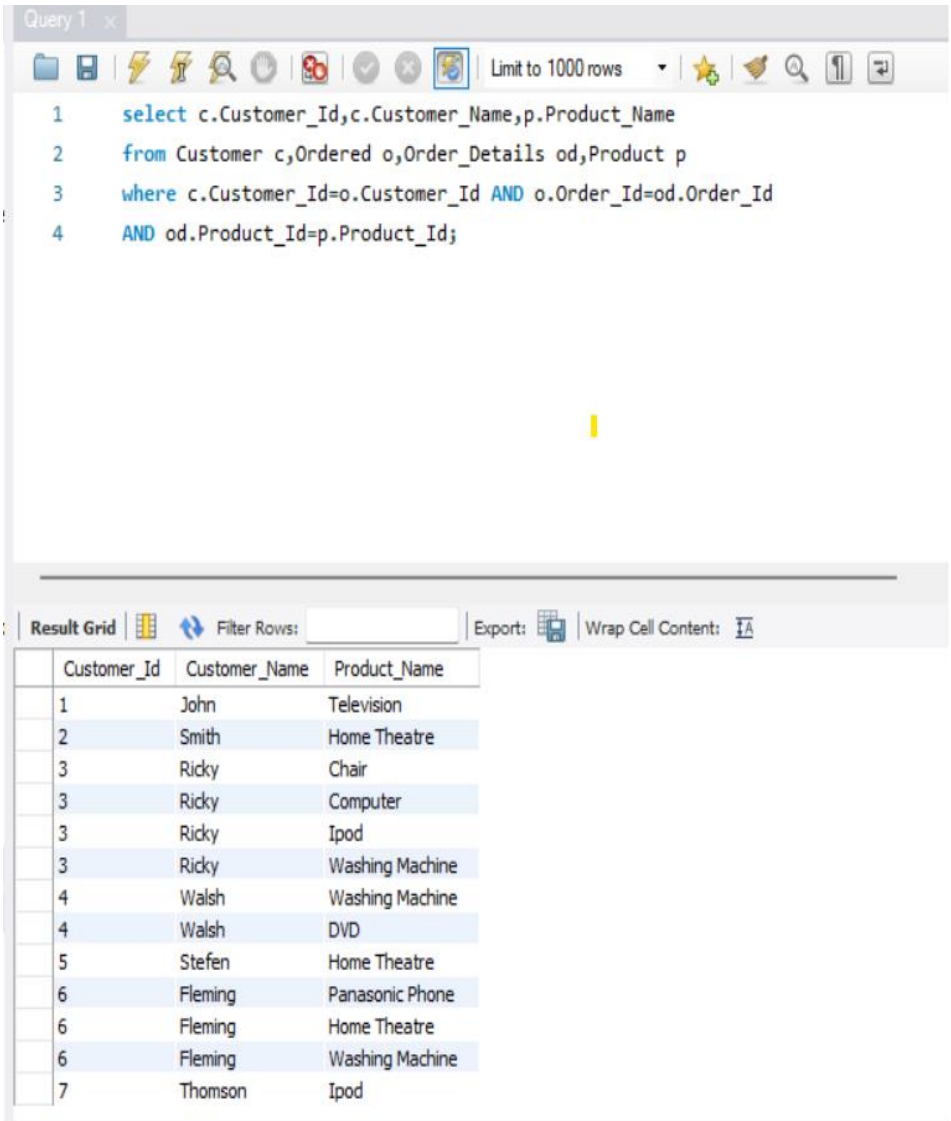
select c.Customer_Id,c.Customer_Name,p.Product_Name

from Customer c,Ordered o,Order_Details od,Product p

where c.Customer_Id=o.Customer_Id AND o.Order_Id=od.Order_Id

AND od.Product_Id=p.Product_Id;

Output:



Customer_Id	Customer_Name	Product_Name
1	John	Television
2	Smith	Home Theatre
3	Ricky	Chair
3	Ricky	Computer
3	Ricky	Ipod
3	Ricky	Washing Machine
4	Walsh	Washing Machine
4	Walsh	DVD
5	Stefen	Home Theatre
6	Fleming	Panasonic Phone
6	Fleming	Home Theatre
6	Fleming	Washing Machine
7	Thomson	Ipod

2.Fetch Order_Id, Ordered_Date, Total Price of the order (product price*qty).

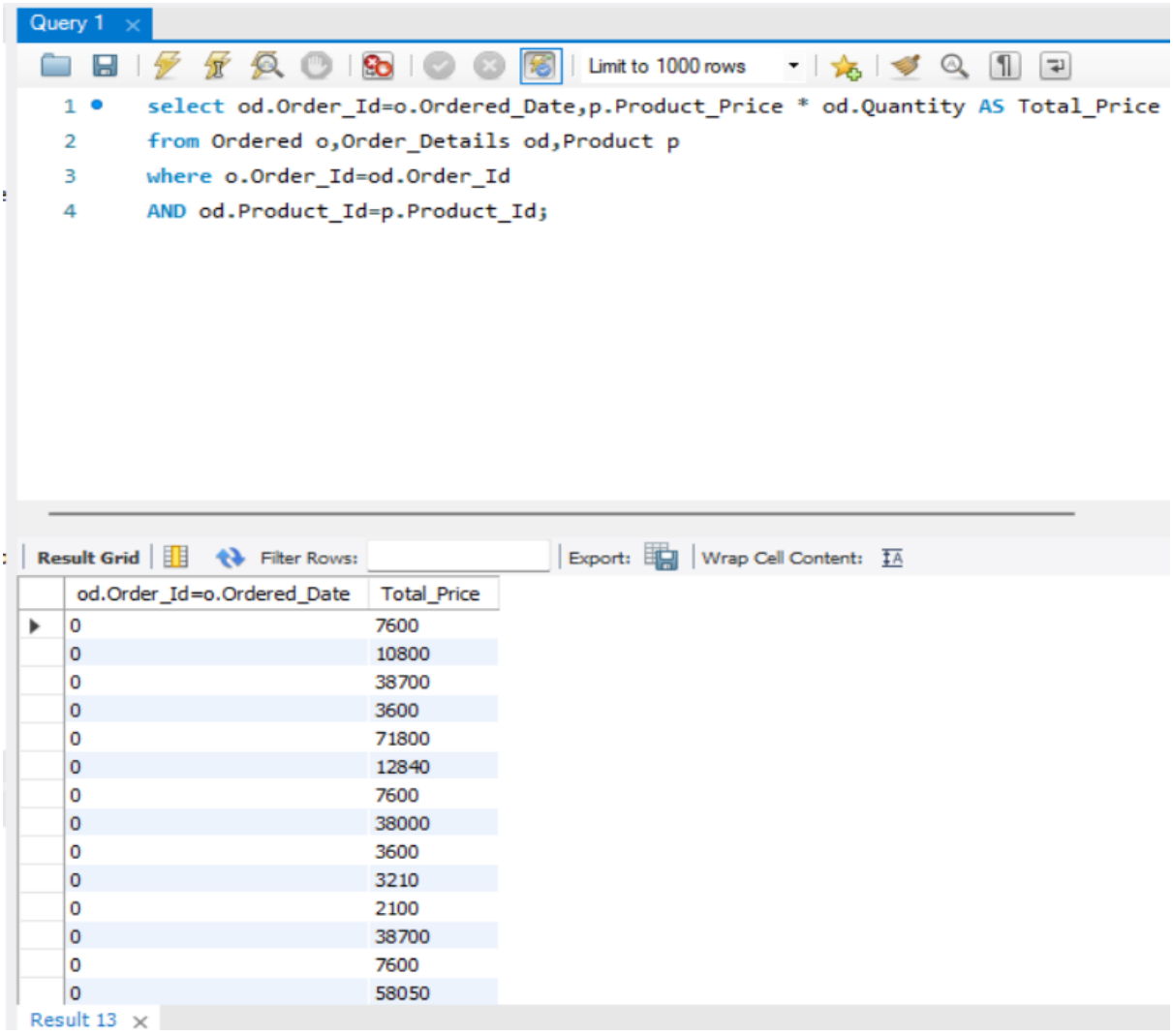
Select od.Order_Id=o.Ordered_Date,p.Product_Price * od.Quantity AS Total_Price

from Ordered o,Order_Details od,Product p

where o.Order_Id=od.Order_Id

AND od.Product_Id=p.Product_Id;

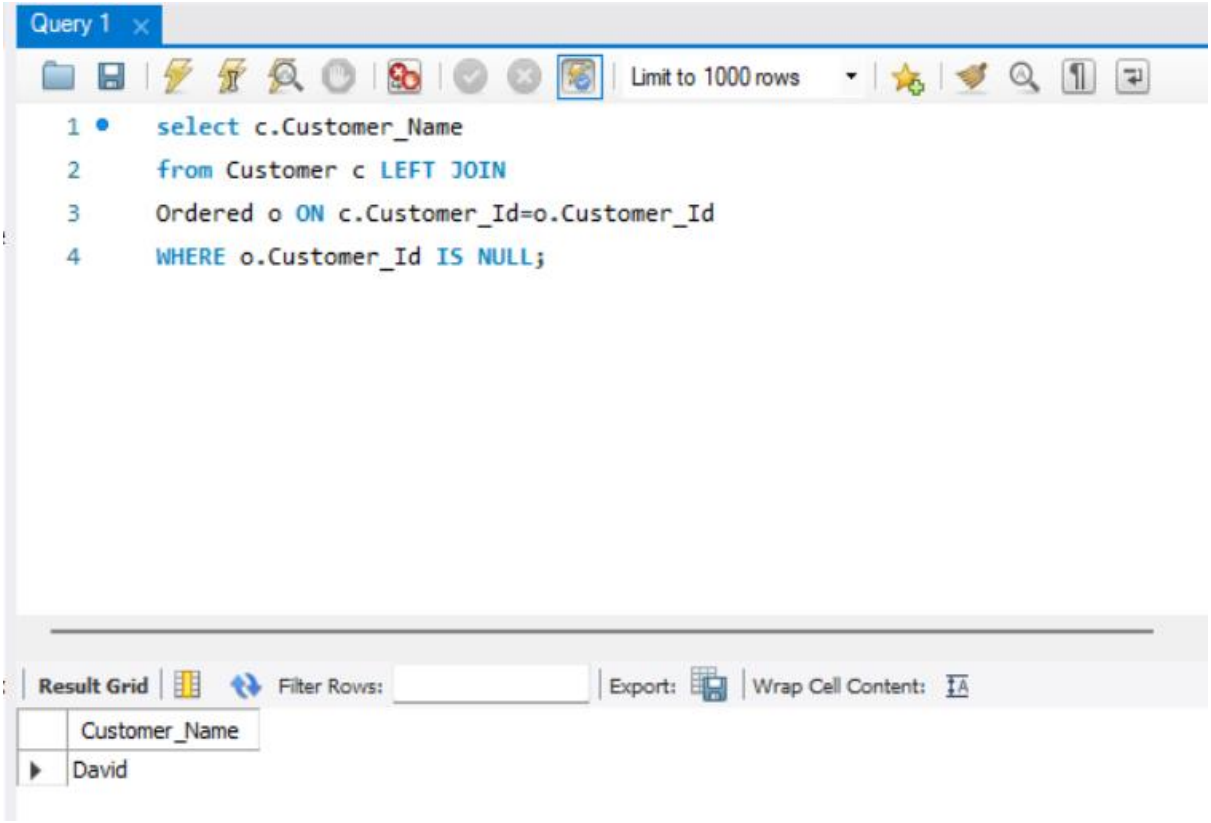
Output:



3.Fetch the Customer Name, who has not placed any order.

```
select c.Customer_Name
from Customer c LEFT JOIN
Ordered o ON c.Customer_Id=o.Customer_Id
WHERE o.Customer_Id IS NULL;
```

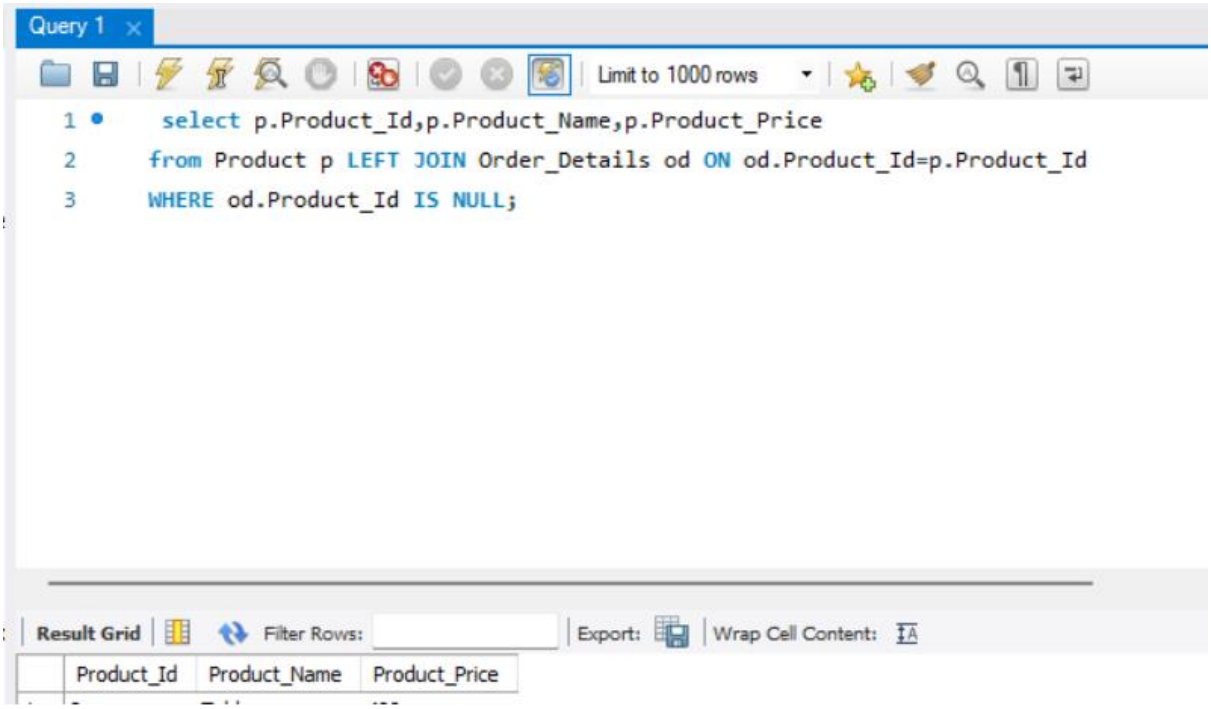
Output:



4.Fetch the Product Details without any order(purchase).

```
select p.Product_Id,p.Product_Name,p.Product_Price
from Product p LEFT JOIN Order_Details od ON od.Product_Id=p.Product_Id
WHERE od.Product_Id IS NULL;
```

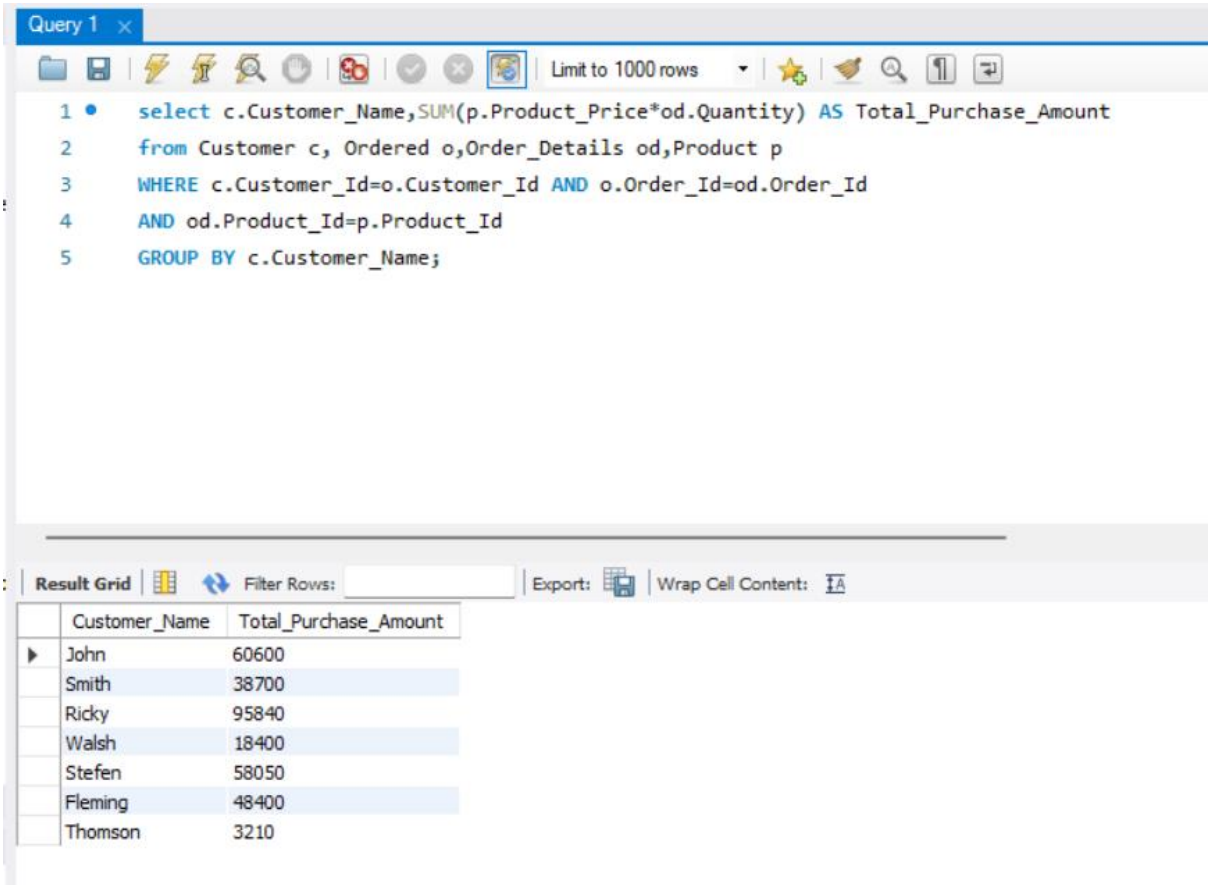
Output:



5.Fetch the Customer name along with the total Purchase Amount.

```
select c.Customer_Name,SUM(p.Product_Price*od.Quantity) AS
Total_Purchase_Amount
from Customer c, Ordered o,Order_Details od,Product p
WHERE c.Customer_Id=o.Customer_Id AND o.Order_Id=od.Order_Id
AND od.Product_Id=p.Product_Id
GROUP BY c.Customer_Name;
```

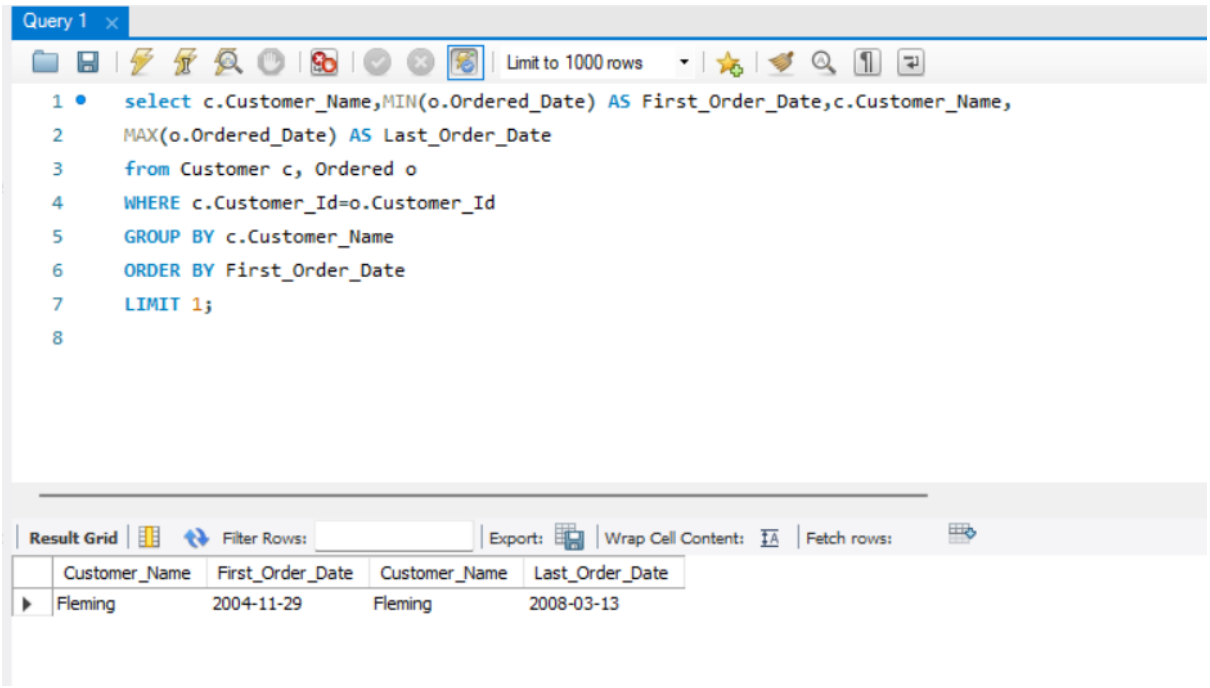
Output:



6.Fetch the Customer details, who has placed the first and last order.

```
select c.Customer_Name,MIN(o.Ordered_Date) AS
First_Order_Date,c.Customer_Name,
MAX(o.Ordered_Date) AS Last_Order_Date
from Customer c, Ordered o
WHERE c.Customer_Id=o.Customer_Id
GROUP BY c.Customer_Name
ORDER BY First_Order_Date
LIMIT 1;
```

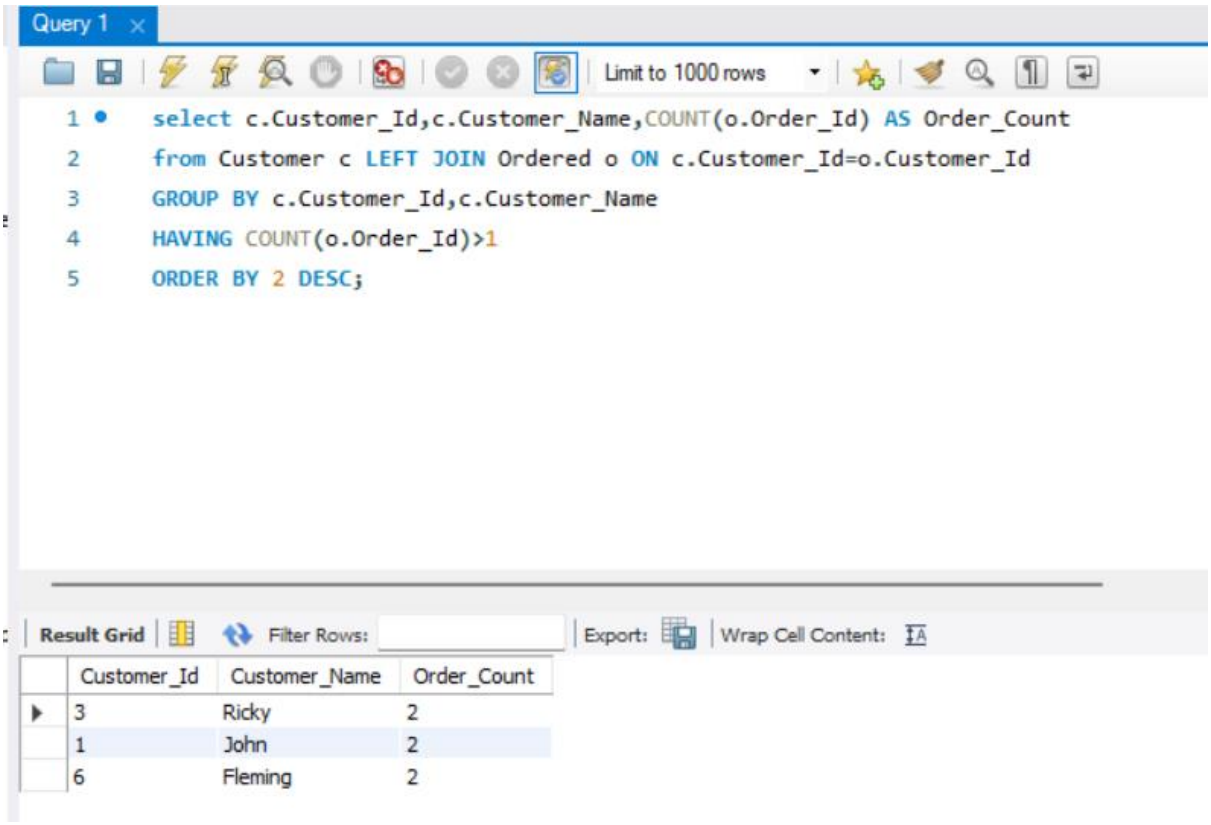
Output:



7.Fetch the customer details , who has placed more number of orders.

```
select c.Customer_Id,c.Customer_Name,COUNT(o.Order_Id) AS Order_Count
from Customer c LEFT JOIN Ordered o ON c.Customer_Id=o.Customer_Id
GROUP BY c.Customer_Id,c.Customer_Name
HAVING COUNT(o.Order_Id)>1
ORDER BY 2 DESC;
```

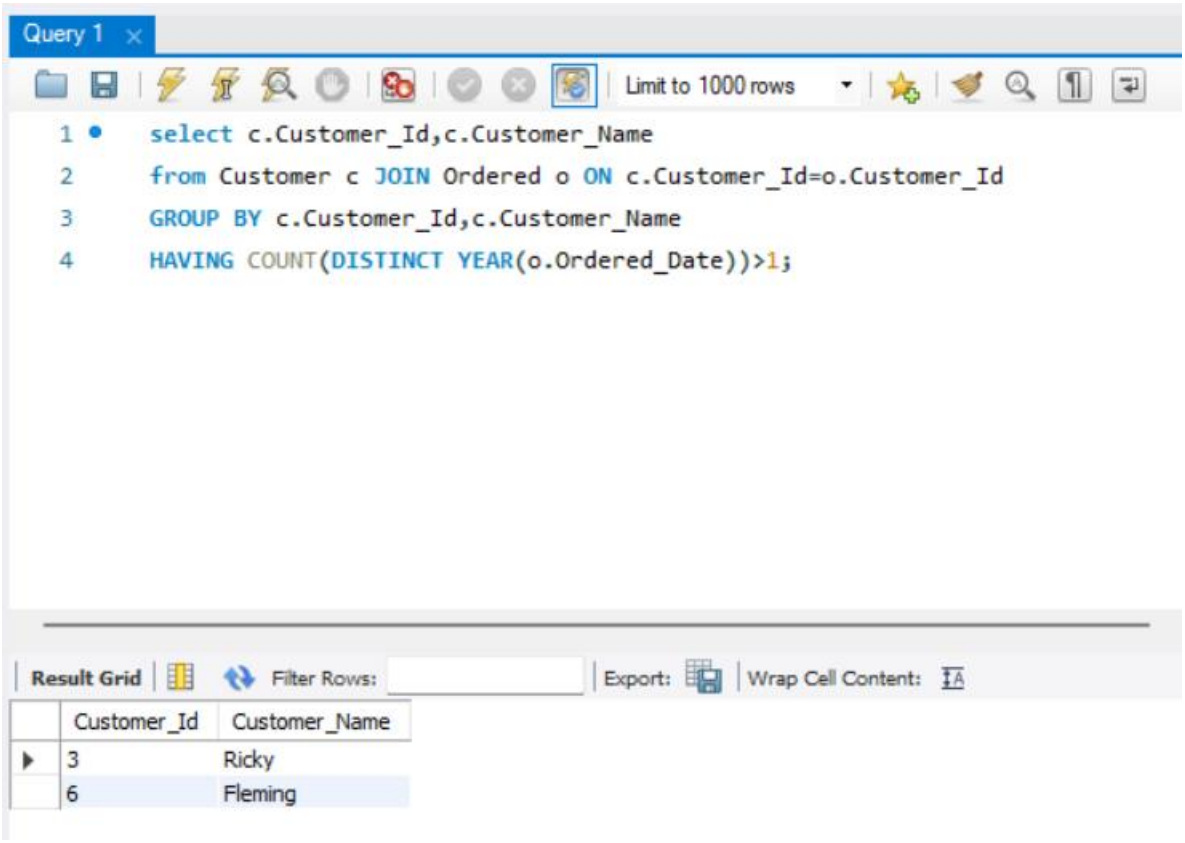
Output:



8.Fetch the customer details, who has placed multiple orders in the same year.

```
select c.Customer_Id,c.Customer_Name
from Customer c JOIN Ordered o ON c.Customer_Id=o.Customer_Id
GROUP BY c.Customer_Id,c.Customer_Name
HAVING COUNT(DISTINCT YEAR(o.Ordered_Date))>1;
```

Output:



9.Fetch the name of the month, in which more number of orders has been placed.

Select MONTHNAME(o.Ordered_Date) AS Month_Name

from Ordered o GROUP BY MONTH(o.Ordered_Date)

ORDER BY COUNT(*) DESC

LIMIT 1;

Output:

```
1 •  SELECT  MONTHNAME(o.Ordered_Date) AS Month_Name
2    FROM Ordered o GROUP BY  MONTH(o.Ordered_Date)
3    ORDER BY  COUNT(*) DESC
4    LIMIT 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Month_Name
March

10.Fetch the maximum priced Ordered Product.

```
select p.Product_Id,p.Product_Name,p.Product_Price
from Product p JOIN Order_Details od ON p.Product_Id=od.Product_Id
WHERE p.Product_Price=(select MAX(Product_Price) from Product);
```

Output: