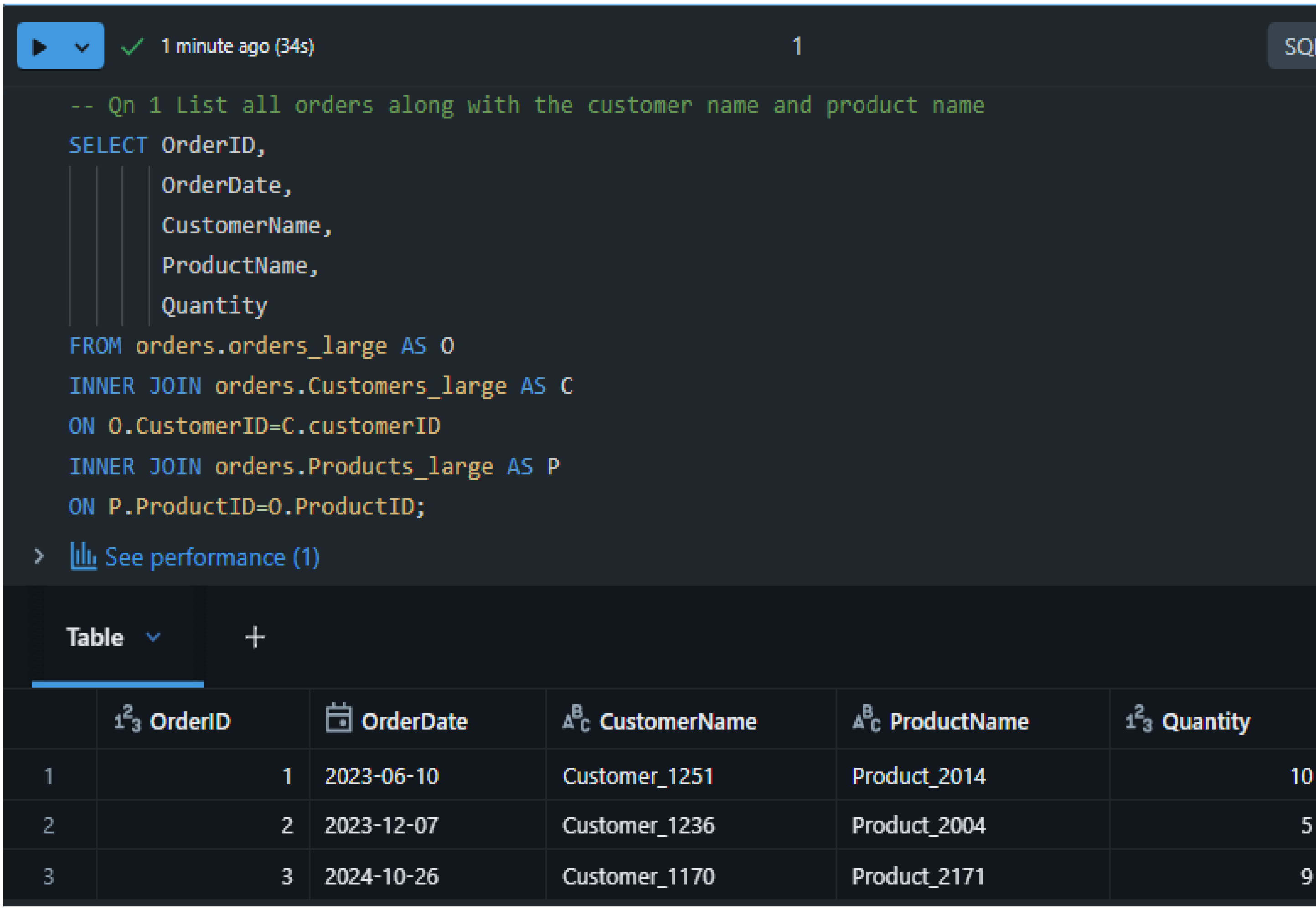
Nolwazi Ndiweni

Practical 2

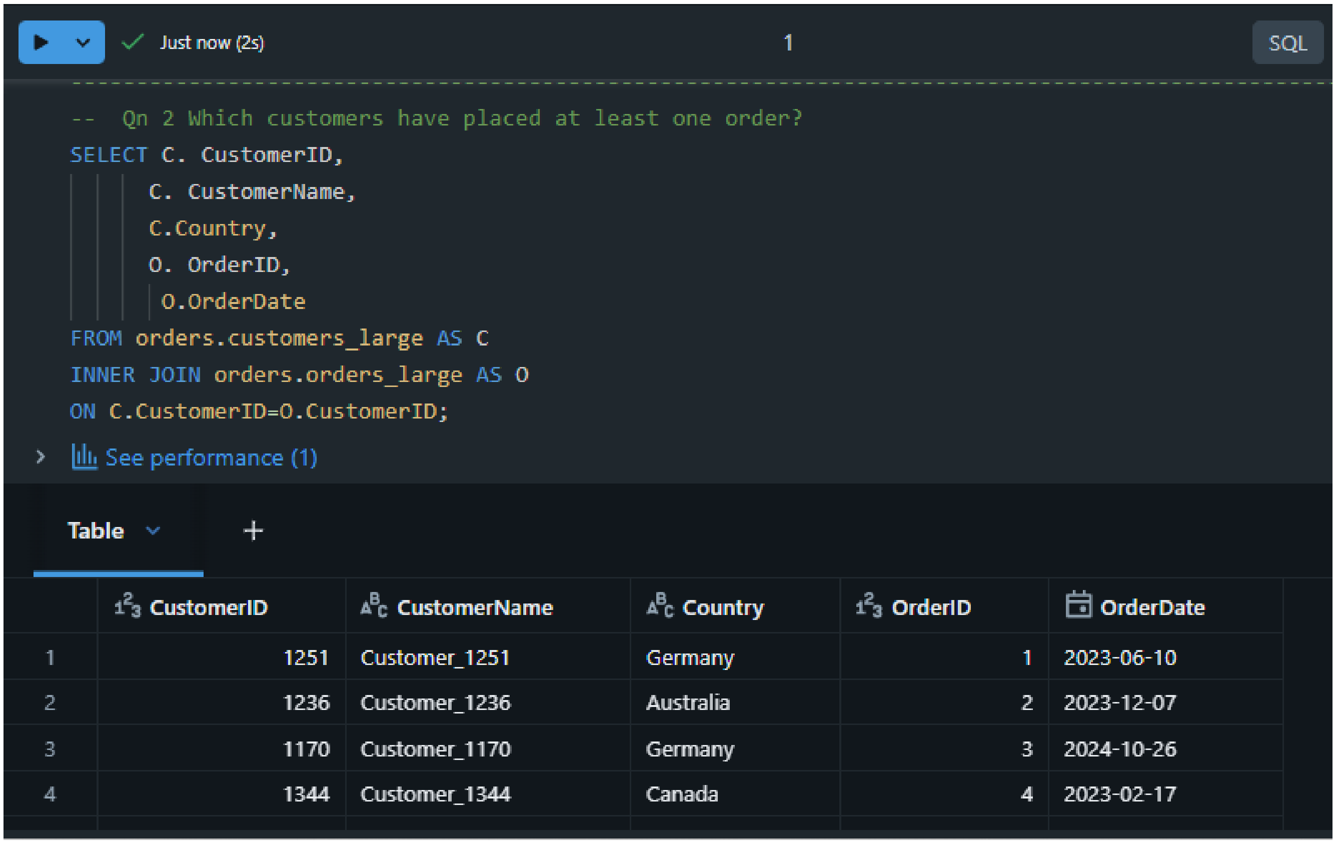
Question 1



```sql
-- Qn 1 List all orders along with the customer name and product name
SELECT OrderID,
       OrderDate,
       CustomerName,
       ProductName,
       Quantity
FROM orders.orders_large AS O
INNER JOIN orders.Customers_large AS C
ON O.CustomerID=C.customerID
INNER JOIN orders.Products_large AS P
ON P.ProductID=O.ProductID;
```

	OrderID	OrderDate	CustomerName	ProductName	Quantity
1	1	2023-06-10	Customer_1251	Product_2014	10
2	2	2023-12-07	Customer_1236	Product_2004	5
3	3	2024-10-26	Customer_1170	Product_2171	9

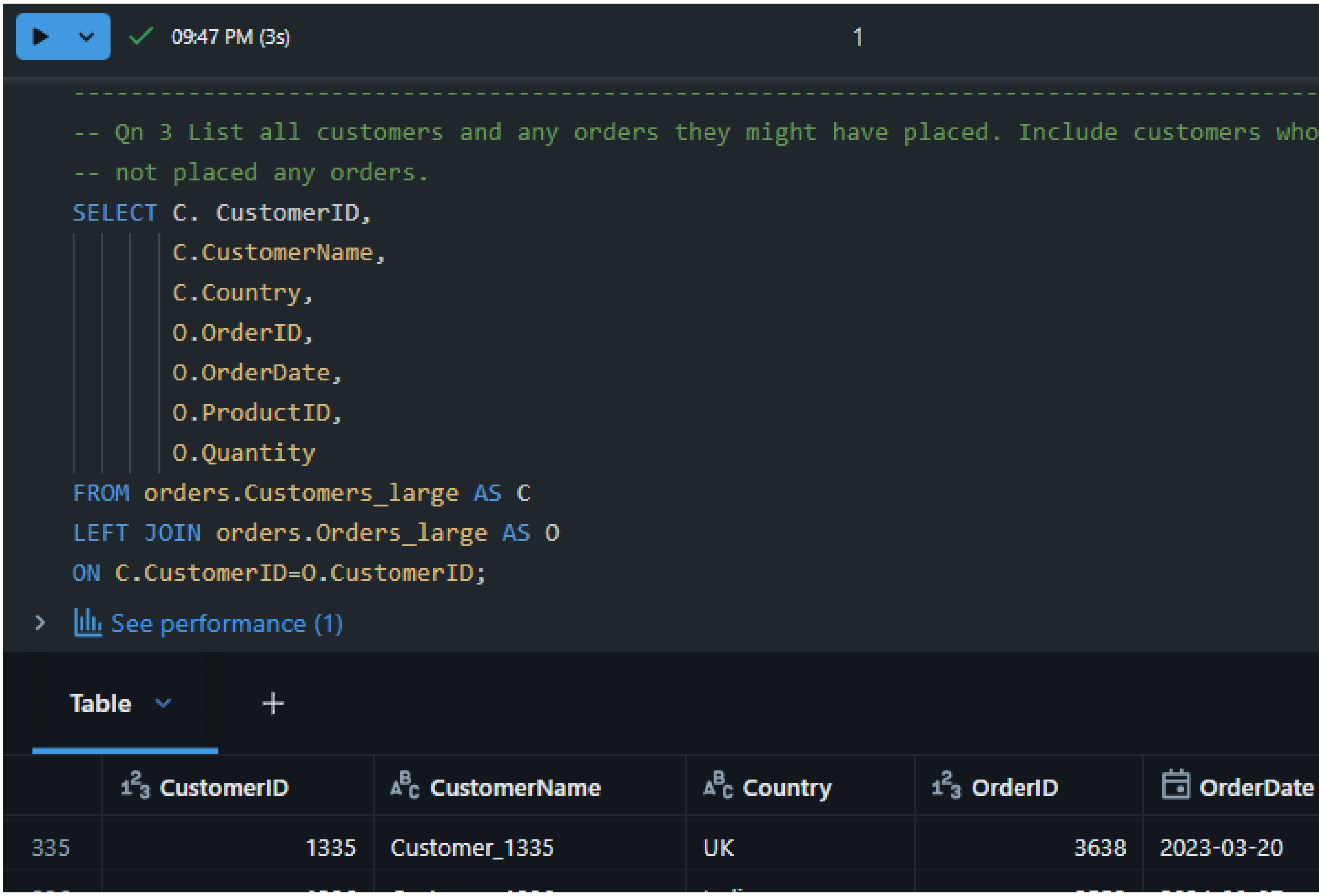
Question 2



```
-----------------------------------------------------------------------------------------------
--  Qn 2 Which customers have placed at least one order?
SELECT C. CustomerID,
      C. CustomerName,
      C.Country,
      O. OrderID,
       O.OrderDate
FROM orders.customers_large AS C
INNER JOIN orders.orders_large AS O
ON C.CustomerID=O.CustomerID;
```

	CustomerID	CustomerName	Country	OrderID	OrderDate
1	1251	Customer_1251	Germany	1	2023-06-10
2	1236	Customer_1236	Australia	2	2023-12-07
3	1170	Customer_1170	Germany	3	2024-10-26
4	1344	Customer_1344	Canada	4	2023-02-17

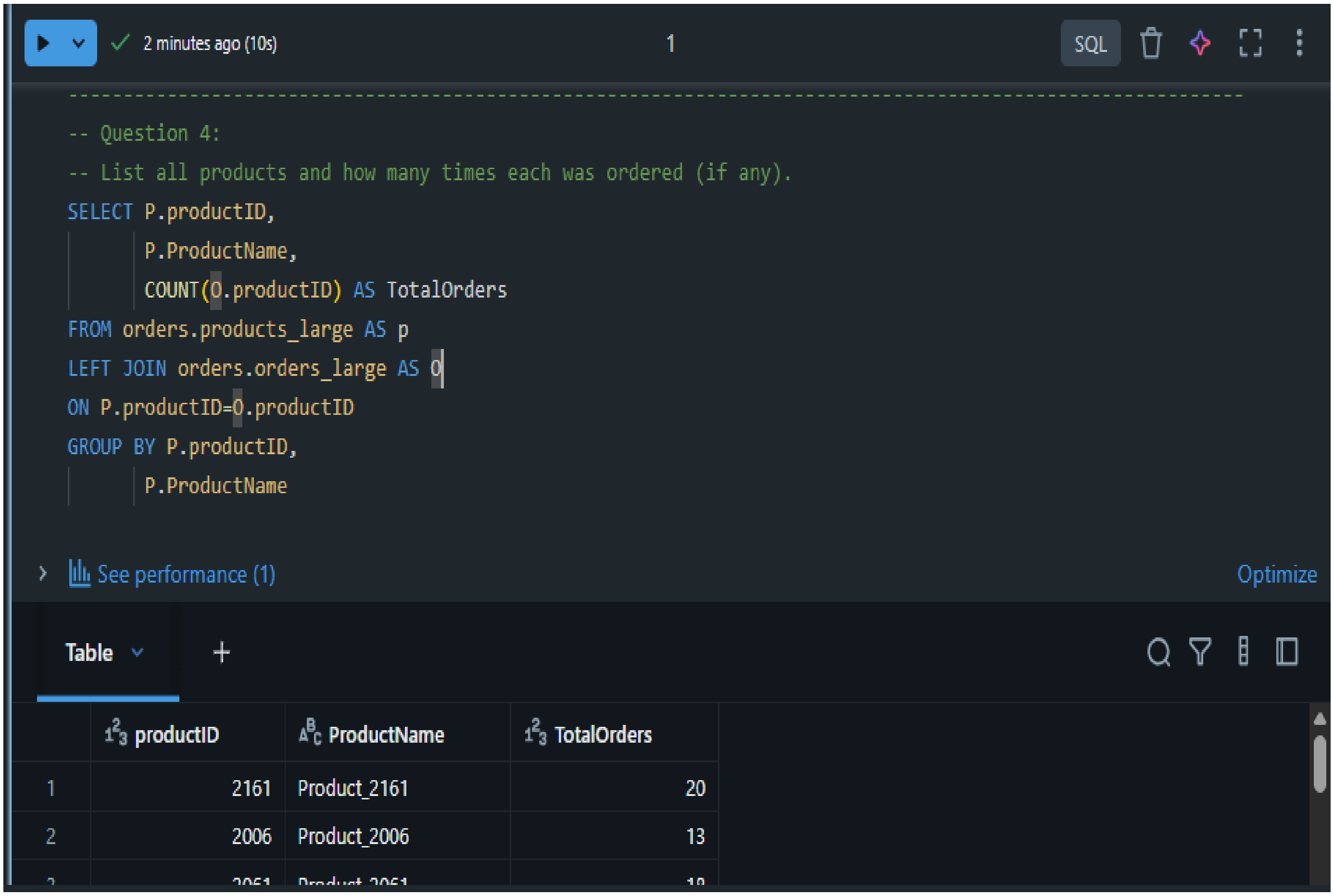
Question 3



```
--------------------------------------------------------------------------------
-- Qn 3 List all customers and any orders they might have placed. Include customers who
-- not placed any orders.
SELECT C. CustomerID,
       C.CustomerName,
       C.Country,
       O.OrderID,
       O.OrderDate,
       O.ProductID,
       O.Quantity
FROM orders.Customers_large AS C
LEFT JOIN orders.Orders_large AS O
ON C.CustomerID=O.CustomerID;
```

	CustomerID	CustomerName	Country	OrderID	OrderDate
335	1335	Customer_1335	UK	3638	2023-03-20

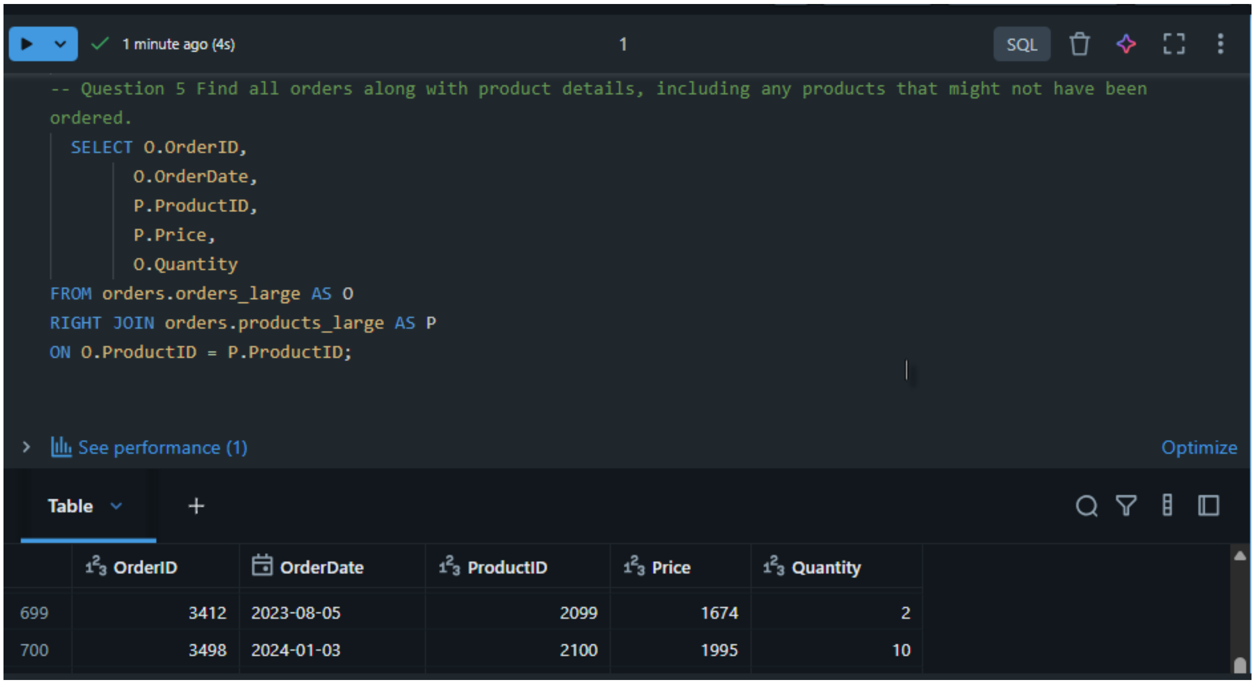
Question 4



```sql
------------------------------------------------------------------------------------------------
-- Question 4:
-- List all products and how many times each was ordered (if any).
SELECT P.productID,
       P.ProductName,
       COUNT(O.productID) AS TotalOrders
FROM orders.products_large AS p
LEFT JOIN orders.orders_large AS O
ON P.productID=O.productID
GROUP BY P.productID,
       P.ProductName
```

	productID	ProductName	TotalOrders
1	2161	Product_2161	20
2	2006	Product_2006	13
3	2061	Product_2061	18

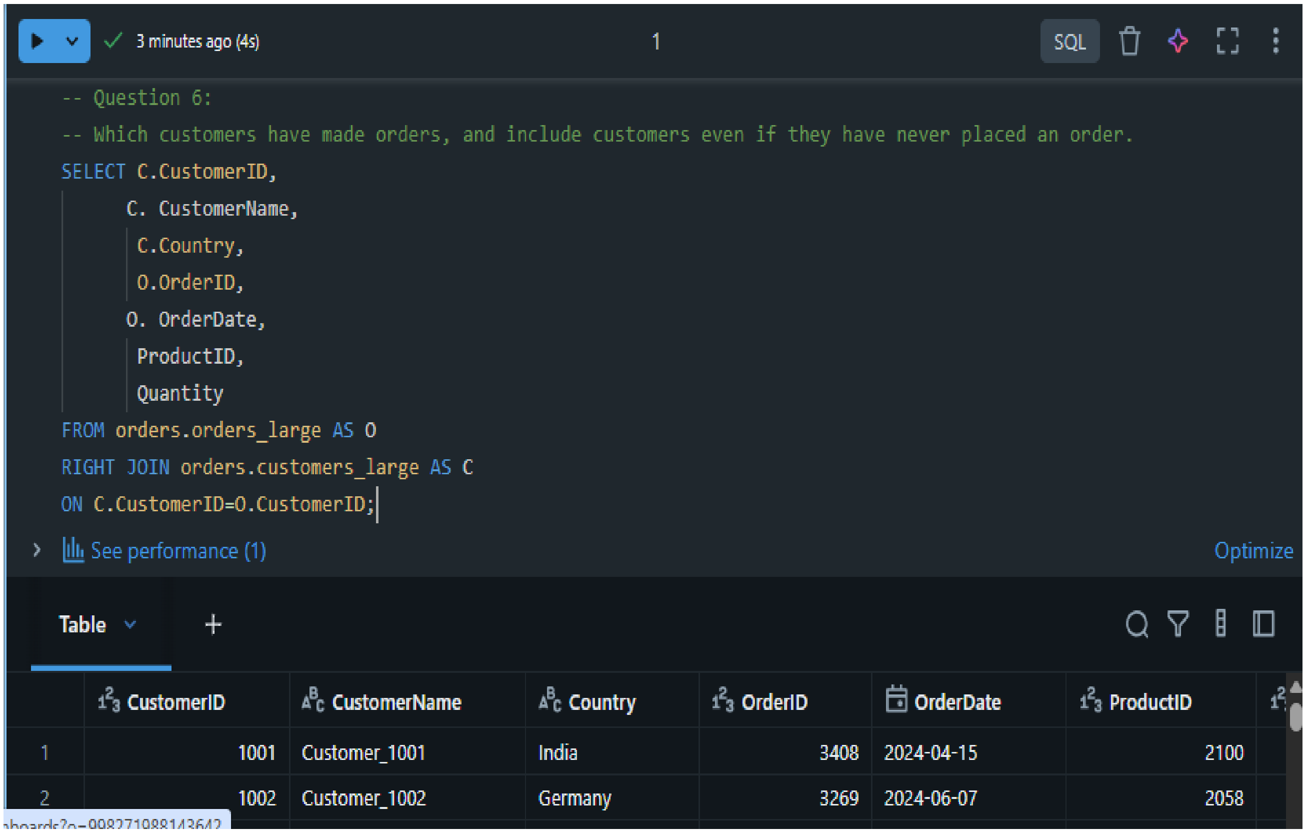
Question 5



```
-- Question 5 Find all orders along with product details, including any products that might not have been
ordered.
 SELECT O.OrderID,
        O.OrderDate,
        P.ProductID,
        P.Price,
        O.Quantity
FROM orders.orders_large AS O
RIGHT JOIN orders.products_large AS P
ON O.ProductID = P.ProductID;
```

	OrderID	OrderDate	ProductID	Price	Quantity
699	3412	2023-08-05	2099	1674	2
700	3498	2024-01-03	2100	1995	10

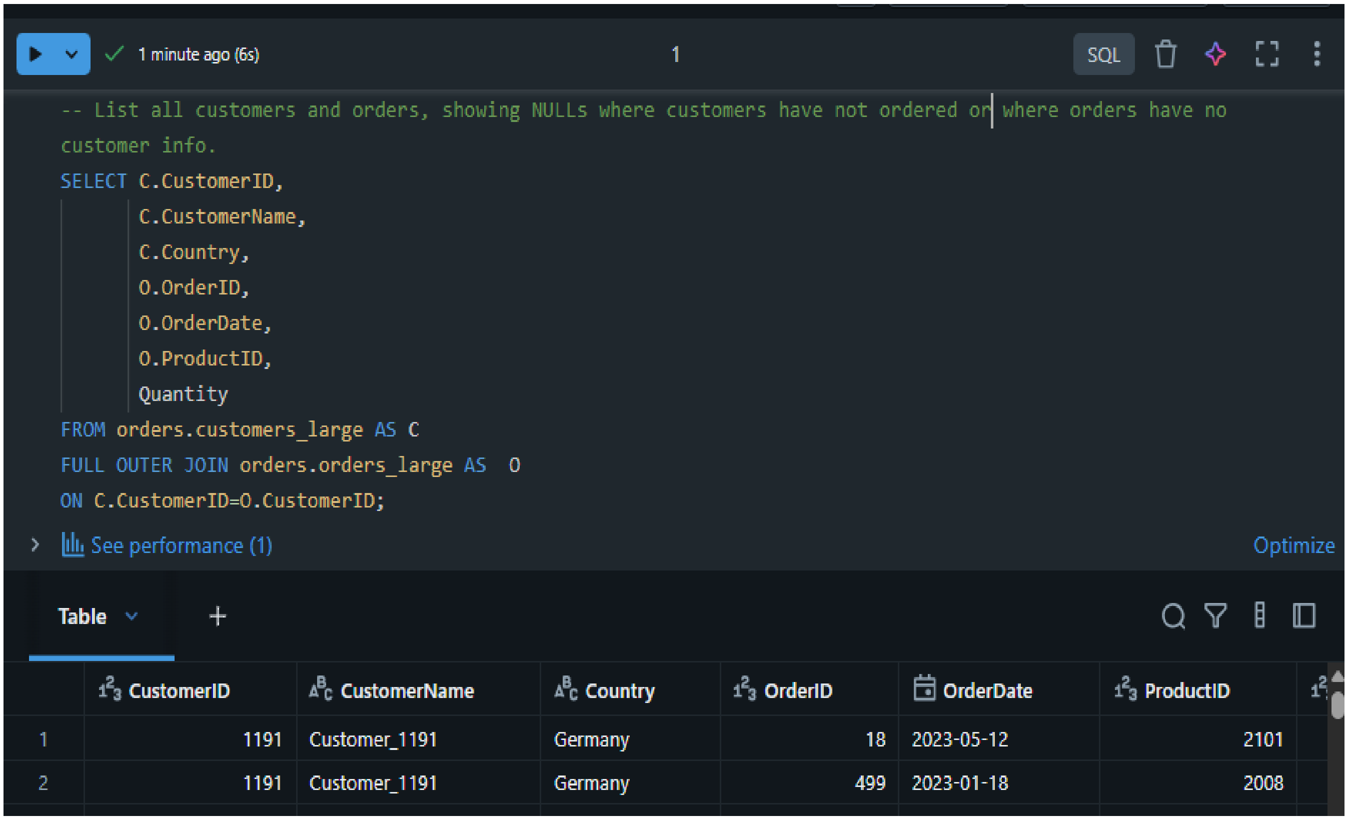
Question 6



```sql
-- Question 6:
-- Which customers have made orders, and include customers even if they have never placed an order.
SELECT C.CustomerID,
      C. CustomerName,
       C.Country,
       O.OrderID,
      O. OrderDate,
       ProductID,
       Quantity
FROM orders.orders_large AS O
RIGHT JOIN orders.customers_large AS C
ON C.CustomerID=O.CustomerID;
```

	CustomerID	CustomerName	Country	OrderID	OrderDate	ProductID
1	1001	Customer_1001	India	3408	2024-04-15	2100
2	1002	Customer_1002	Germany	3269	2024-06-07	2058

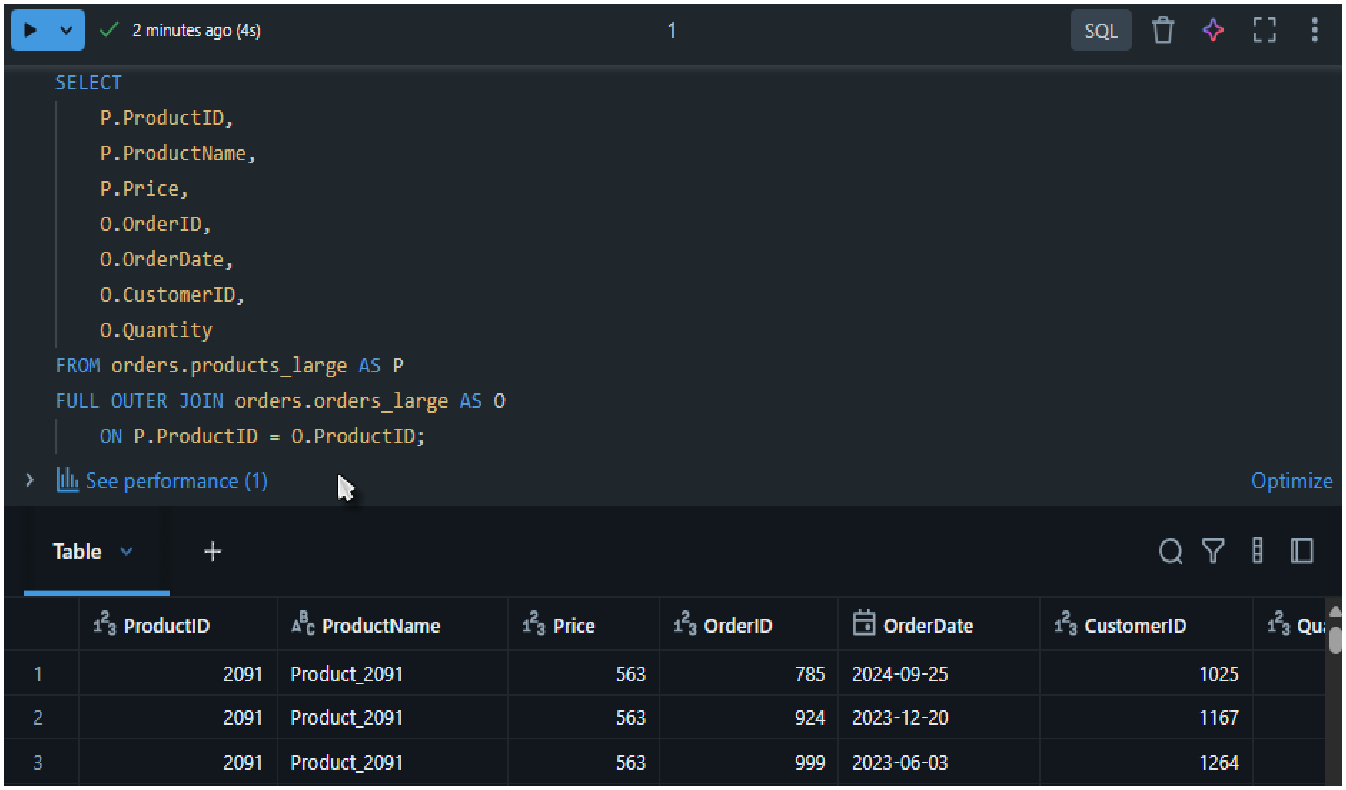
QUESTION 7



```
-- List all customers and orders, showing NULLs where customers have not ordered or where orders have no
customer info.
SELECT C.CustomerID,
       C.CustomerName,
       C.Country,
       O.OrderID,
       O.OrderDate,
       O.ProductID,
       Quantity
FROM orders.customers_large AS C
FULL OUTER JOIN orders.orders_large AS  O
ON C.CustomerID=O.CustomerID;
```

	CustomerID	CustomerName	Country	OrderID	OrderDate	ProductID
1	1191	Customer_1191	Germany	18	2023-05-12	2101
2	1191	Customer_1191	Germany	499	2023-01-18	2008

Question 8



```sql
SELECT
    P.ProductID,
    P.ProductName,
    P.Price,
    O.OrderID,
    O.OrderDate,
    O.CustomerID,
    O.Quantity
FROM orders.products_large AS P
FULL OUTER JOIN orders.orders_large AS O
    ON P.ProductID = O.ProductID;
```

	ProductID	ProductName	Price	OrderID	OrderDate	CustomerID	Qu
1	2091	Product_2091	563	785	2024-09-25	1025	
2	2091	Product_2091	563	924	2023-12-20	1167	
3	2091	Product_2091	563	999	2023-06-03	1264	