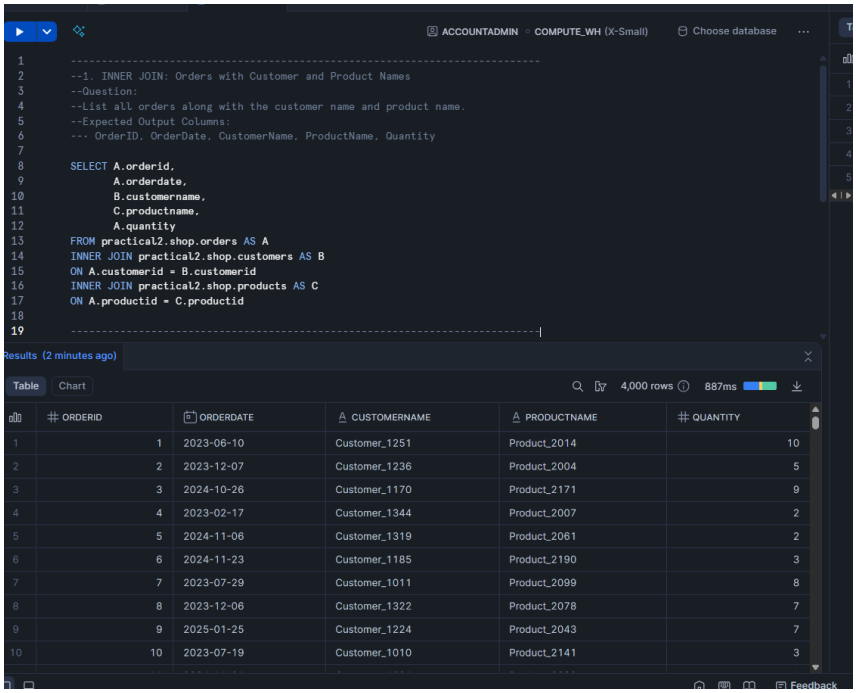
Practical 2 -SQL JOIN Practice Questions Lefa Makhurubetshi

Question 1



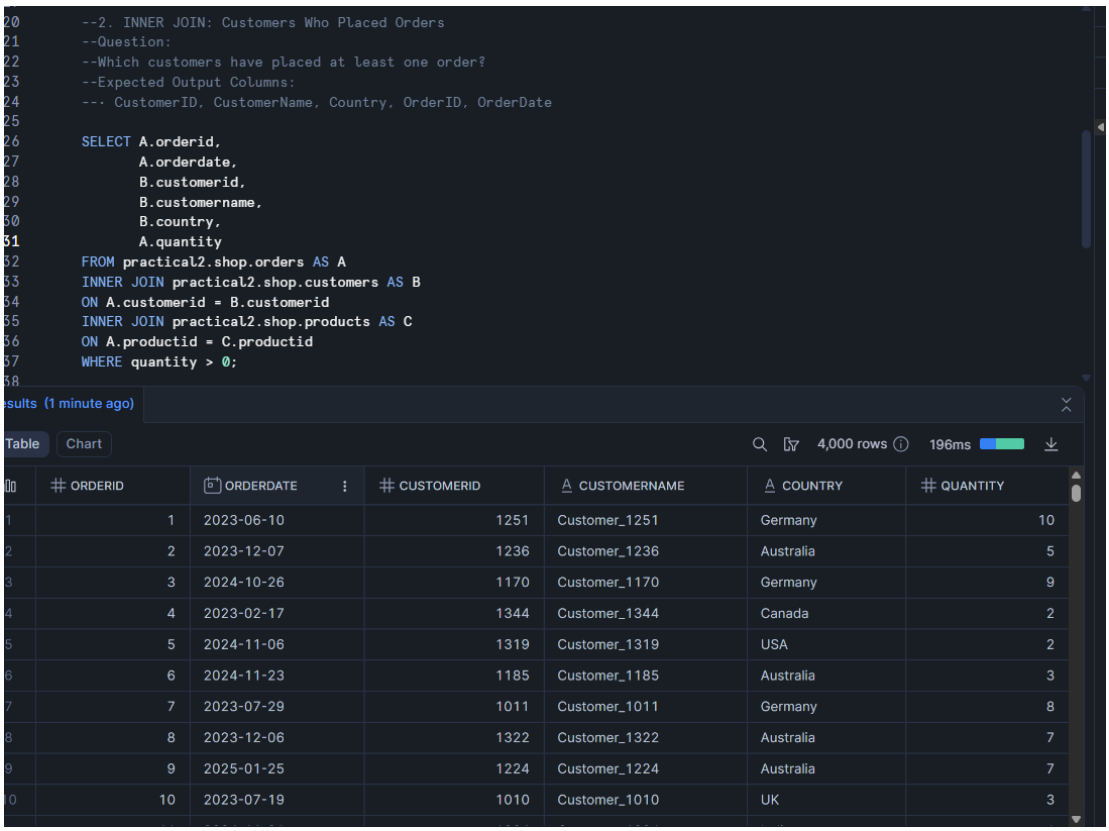
```
--1. INNER JOIN: Orders with Customer and Product Names
--Question:
--List all orders along with the customer name and product name.
--Expected Output Columns:
--- OrderID, OrderDate, CustomerName, ProductName, Quantity

SELECT A.orderid,
       A.orderdate,
       B.customername,
       C.productname,
       A.quantity
FROM practical2.shop.orders AS A
INNER JOIN practical2.shop.customers AS B
ON A.customerid = B.customerid
INNER JOIN practical2.shop.products AS C
ON A.productid = C.productid
```

Results (2 minutes ago) — Table | Chart — 4,000 rows — 887ms

	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
4	4	2023-02-17	Customer_1344	Product_2007	2
5	5	2024-11-06	Customer_1319	Product_2061	2
6	6	2024-11-23	Customer_1185	Product_2190	3
7	7	2023-07-29	Customer_1011	Product_2099	8
8	8	2023-12-06	Customer_1322	Product_2078	7
9	9	2025-01-25	Customer_1224	Product_2043	7
10	10	2023-07-19	Customer_1010	Product_2141	3

Question 2



```
--2. INNER JOIN: Customers Who Placed Orders
--Question:
--Which customers have placed at least one order?
--Expected Output Columns:
--- CustomerID, CustomerName, Country, OrderID, OrderDate

SELECT A.orderid,
       A.orderdate,
       B.customerid,
       B.customername,
       B.country,
       A.quantity
FROM practical2.shop.orders AS A
INNER JOIN practical2.shop.customers AS B
ON A.customerid = B.customerid
INNER JOIN practical2.shop.products AS C
ON A.productid = C.productid
WHERE quantity > 0;
```

Results (1 minute ago) — Table | Chart — 4,000 rows — 196ms

	ORDERID	ORDERDATE	CUSTOMERID	CUSTOMERNAME	COUNTRY	QUANTITY
1	1	2023-06-10	1251	Customer_1251	Germany	10
2	2	2023-12-07	1236	Customer_1236	Australia	5
3	3	2024-10-26	1170	Customer_1170	Germany	9
4	4	2023-02-17	1344	Customer_1344	Canada	2
5	5	2024-11-06	1319	Customer_1319	USA	2
6	6	2024-11-23	1185	Customer_1185	Australia	3
7	7	2023-07-29	1011	Customer_1011	Germany	8
8	8	2023-12-06	1322	Customer_1322	Australia	7
9	9	2025-01-25	1224	Customer_1224	Australia	7
10	10	2023-07-19	1010	Customer_1010	UK	3

Question 3

```sql
--3. LEFT JOIN: All Customers and Their Orders
--Question:
--List all customers and any orders they might have placed. Include customers who have not placed any orders.
--Expected Output Columns:
--- CustomerID, CustomerName, Country, OrderID, OrderDate, ProductID, Quantity

SELECT
    B.customerID,
    B.customerName,
    B.country,
    A.orderID,
    A.orderDate,
    A.productID,
    A.quantity
FROM practical2.shop.customers AS B
LEFT JOIN practical2.shop.orders AS A
    ON A.customerID = B.customerID;
```

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ble Chart 4,000 rows 592ms

CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE	PRODUCTID	QUANTITY
1251	Customer_1251	Germany	1	2023-06-10	2014	10
1236	Customer_1236	Australia	2	2023-12-07	2004	5
1170	Customer_1170	Germany	3	2024-10-26	2171	9
1344	Customer_1344	Canada	4	2023-02-17	2007	2
1319	Customer_1319	USA	5	2024-11-06	2061	2
1185	Customer_1185	Australia	6	2024-11-23	2190	3
1011	Customer_1011	Germany	7	2023-07-29	2099	8
1322	Customer_1322	Australia	8	2023-12-06	2078	7
1224	Customer_1224	Australia	9	2025-01-25	2043	7
1010	Customer_1010	UK	10	2023-07-19	2141	3

Question 4

```sql
--4. LEFT JOIN: Product Order Count
--Question:
--List all products and how many times each was ordered (if any).
--Expected Output Columns:
--- ProductID, ProductName, TotalOrders (TotalOrders is the count of how many times the product appears in orders)

SELECT
    C.productID,
    C.productName,
    COUNT(A.orderID) AS TotalOrders
FROM practical2.shop.products AS C
LEFT JOIN practical2.shop.orders AS A
    ON A.productID = C.productID
GROUP BY C.productID, C.productName;

--5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)
--Question:Find all orders along with product details, including any products that might not have been ordered.
--Expected Output Columns:
```

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Table Chart 200 rows 251ms

	PRODUCTID	PRODUCTNAME	TOTALORDERS
1	2007	Product_2007	12
2	2190	Product_2190	20
3	2078	Product_2078	18
4	2047	Product_2047	20
5	2167	Product_2167	27
6	2089	Product_2089	20
7	2059	Product_2059	17
8	2153	Product_2153	20
9	2023	Product_2023	20
10	2160	Product_2160	27

Question 5

```sql
--5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)
--Question:Find all orders along with product details, including any products that might not have been ordered.
--Expected Output Columns:
--- OrderID, OrderDate, ProductID, ProductName, Price, Quantity

SELECT
    A.orderID,
    A.orderDate,
    C.productID,
    C.productName,
    C.price,
    A.quantity
FROM practical2.shop.orders AS A
RIGHT JOIN practical2.shop.products AS C
    ON A.productID = C.productID;
--6. RIGHT JOIN: Customer Info with Orders (Include All Customers)
--Question: Which customers have made orders, and include customers even if they have never placed an order.
```

ults (2 minutes ago)

Table | Chart — 4,000 rows — 191ms

ORDERID	ORDERDATE	PRODUCTID	PRODUCTNAME	PRICE	QUANTITY
1	2023-06-10	2014	Product_2014	522	10
2	2023-12-07	2004	Product_2004	1996	5
3	2024-10-26	2171	Product_2171	76	9
4	2023-02-17	2007	Product_2007	156	2
5	2024-11-06	2061	Product_2061	1595	2
6	2024-11-23	2190	Product_2190	1755	3
7	2023-07-29	2099	Product_2099	1674	8
8	2023-12-06	2078	Product_2078	333	7
9	2025-01-25	2043	Product_2043	1947	7
10	2023-07-19	2141	Product_2141	1599	3

Question 6

Home | Practical 1.sql | Practical2.sql

ACCOUNTADMIN · COMPUTE_WH (X-Small) — Choose database

```sql
--6. RIGHT JOIN: Customer Info with Orders (Include All Customers)
--Question: Which customers have made orders, and include customers even if they have never placed an order.
--Expected Output Columns:
--- CustomerID, CustomerName, Country, OrderID, OrderDate, ProductID, Quantity

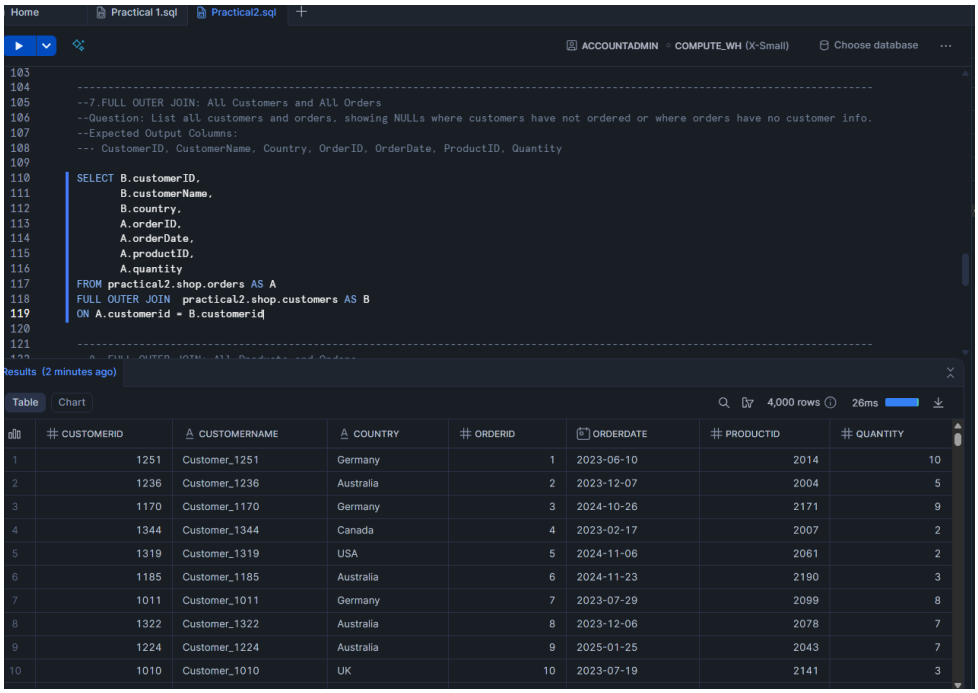
SELECT B.customerID,
       B.customerName,
       B.country,
       A.orderID,
       A.orderDate,
       A.productID,
       A.quantity
FROM practical2.shop.orders AS A
RIGHT JOIN  practical2.shop.customers AS B
ON A.customerid = B.customerid
```

Results (1 minute ago)

Table | Chart — 4,000 rows — 203ms

CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE	PRODUCTID	QUANTITY
1251	Customer_1251	Germany	1	2023-06-10	2014	10
1236	Customer_1236	Australia	2	2023-12-07	2004	5
1170	Customer_1170	Germany	3	2024-10-26	2171	9
1344	Customer_1344	Canada	4	2023-02-17	2007	2
1319	Customer_1319	USA	5	2024-11-06	2061	2
1185	Customer_1185	Australia	6	2024-11-23	2190	3
1011	Customer_1011	Germany	7	2023-07-29	2099	8
1322	Customer_1322	Australia	8	2023-12-06	2078	7
1224	Customer_1224	Australia	9	2025-01-25	2043	7
1010	Customer_1010	UK	10	2023-07-19	2141	3

Question 7



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Home | Practical 1.sql | Practical2.sql

ACCOUNTADMIN · COMPUTE_WH (X-Small) | Choose database

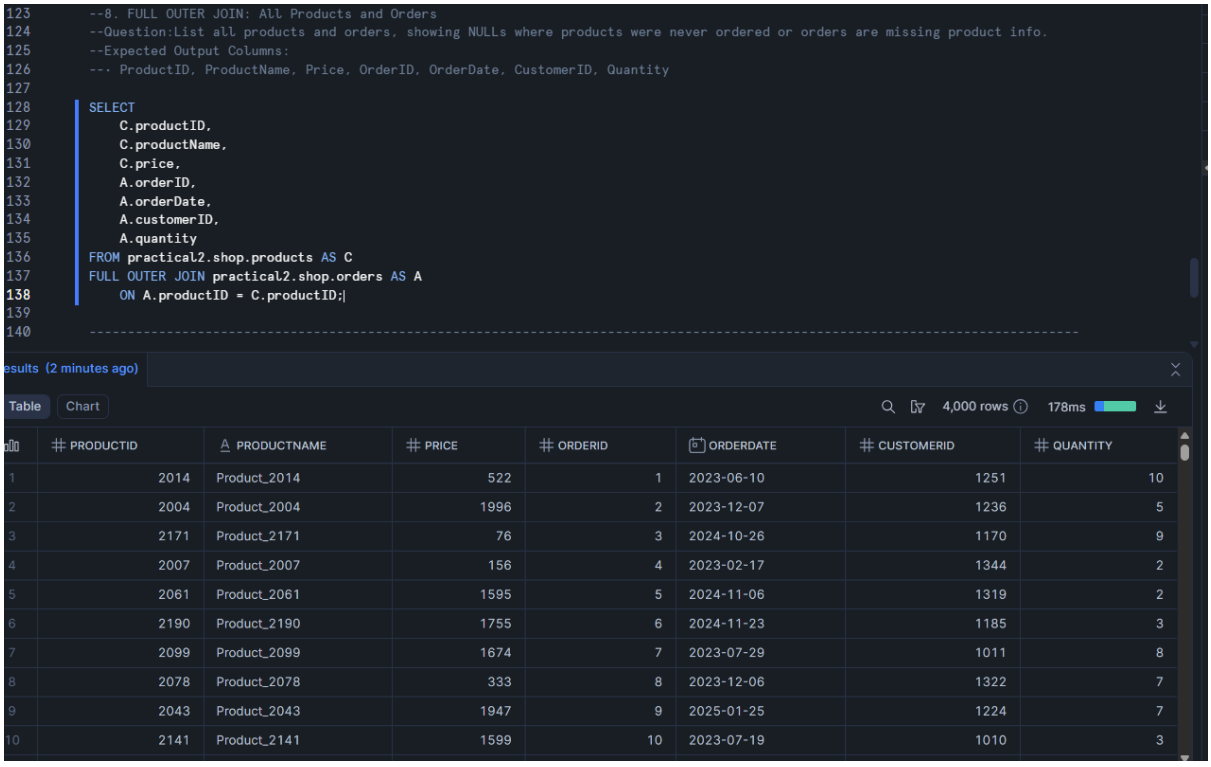
103
104     ------------------------------------------------------------------------------------------------------------------------
105     --7.FULL OUTER JOIN: All Customers and All Orders
106     --Question: List all customers and orders, showing NULLs where customers have not ordered or where orders have no customer info.
107     --Expected Output Columns:
108     --- CustomerID, CustomerName, Country, OrderID, OrderDate, ProductID, Quantity
109
110   SELECT B.customerID,
111         B.customerName,
112         B.country,
113         A.orderID,
114         A.orderDate,
115         A.productID,
116         A.quantity
117   FROM practical2.shop.orders AS A
118   FULL OUTER JOIN  practical2.shop.customers AS B
119   ON A.customerid = B.customerid
120
121     ------------------------------------------------------------------------------------------------------------------------
```

Results (2 minutes ago)

Table | Chart — 4,000 rows — 26ms

	CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE	PRODUCTID	QUANTITY
1	1251	Customer_1251	Germany	1	2023-06-10	2014	10
2	1236	Customer_1236	Australia	2	2023-12-07	2004	5
3	1170	Customer_1170	Germany	3	2024-10-26	2171	9
4	1344	Customer_1344	Canada	4	2023-02-17	2007	2
5	1319	Customer_1319	USA	5	2024-11-06	2061	2
6	1185	Customer_1185	Australia	6	2024-11-23	2190	3
7	1011	Customer_1011	Germany	7	2023-07-29	2099	8
8	1322	Customer_1322	Australia	8	2023-12-06	2078	7
9	1224	Customer_1224	Australia	9	2025-01-25	2043	7
10	1010	Customer_1010	UK	10	2023-07-19	2141	3

Question 8



```
123     --8. FULL OUTER JOIN: All Products and Orders
124     --Question:List all products and orders, showing NULLs where products were never ordered or orders are missing product info.
125     --Expected Output Columns:
126     --- ProductID, ProductName, Price, OrderID, OrderDate, CustomerID, Quantity
127
128   SELECT
129       C.productID,
130       C.productName,
131       C.price,
132       A.orderID,
133       A.orderDate,
134       A.customerID,
135       A.quantity
136   FROM practical2.shop.products AS C
137   FULL OUTER JOIN practical2.shop.orders AS A
138       ON A.productID = C.productID;
139
140     ------------------------------------------------------------------------------------------------------------------------
```

esults (2 minutes ago)

Table | Chart — 4,000 rows — 178ms

	PRODUCTID	PRODUCTNAME	PRICE	ORDERID	ORDERDATE	CUSTOMERID	QUANTITY
1	2014	Product_2014	522	1	2023-06-10	1251	10
2	2004	Product_2004	1996	2	2023-12-07	1236	5
3	2171	Product_2171	76	3	2024-10-26	1170	9
4	2007	Product_2007	156	4	2023-02-17	1344	2
5	2061	Product_2061	1595	5	2024-11-06	1319	2
6	2190	Product_2190	1755	6	2024-11-23	1185	3
7	2099	Product_2099	1674	7	2023-07-29	1011	8
8	2078	Product_2078	333	8	2023-12-06	1322	7
9	2043	Product_2043	1947	9	2025-01-25	1224	7
10	2141	Product_2141	1599	10	2023-07-19	1010	3