THABO LATHA

PRACTICAL 2

QUESTION 1

```
29    SELECT
30        ORDERS.ORDERID AS OrderID,
31        ORDERS.ORDERDATE AS OrderDate,
32        CUSTOMERS.CUSTOMERNAME AS CustomerName,
33        PRODUCT.PRODUCTNAME AS ProductName,
34        ORDERS.QUANTITY AS Quantity
35    FROM"FOOD_DATA1"."PUBLIC"."ORDERS"
36    INNER JOIN"FOOD_DATA1"."PUBLIC"."CUSTOMERS"
37        ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID
38    INNER JOIN"FOOD_DATA1"."PUBLIC"."PRODUCT"
39        ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;
40
41
42    ---------------------------------------------------------------------------------
43    --QUESTION 2
44
45    SELECT
```

Results (just now)

Table | Chart   8,000 rows ⓘ   176ms

# CUSTOMERID	A CUSTOMERNAME	A 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
5	1319	Customer_1319	USA	5	2024-11-06
6	1185	Customer_1185	Australia	6	2024-11-23

QUESTION 2

```
42    ---------------------------------------------------------------------------------
43    --QUESTION 2
44
45    SELECT
46        CUSTOMERS.CUSTOMERID AS CustomerID,
47        CUSTOMERS.CUSTOMERNAME AS CustomerName,
48        CUSTOMERS.COUNTRY AS Country,
49        ORDERS.ORDERID AS OrderID,
50        ORDERS.ORDERDATE AS OrderDate
51    FROM"FOOD_DATA1"."PUBLIC"."CUSTOMERS"
52    INNER JOIN"FOOD_DATA1"."PUBLIC"."ORDERS"
53        ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;
54
55
56    ---------------------------------------------------------------------------------
57    --QUESTION 3
```

Results (just now)

Table | Chart   8,000 rows ⓘ   45ms

# CUSTOMERID	A CUSTOMERNAME	A 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
5	1319	Customer_1319	USA	5	2024-11-06
6	1185	Customer_1185	Australia	6	2024-11-23

QUESTION 3

```sql
SELECT
    CUSTOMERS.CUSTOMERID AS CustomerID,
    CUSTOMERS.CUSTOMERNAME AS CustomerName,
    CUSTOMERS.COUNTRY AS Country,
    ORDERS.ORDERID AS OrderID,
    ORDERS.ORDERDATE AS OrderDate,
    ORDERS.PRODUCTID AS ProductID,
    ORDERS.QUANTITY AS Quantity
FROM "FOOD_DATA1"."PUBLIC"."CUSTOMERS"
LEFT JOIN "FOOD_DATA1"."PUBLIC"."ORDERS"
    ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;
```

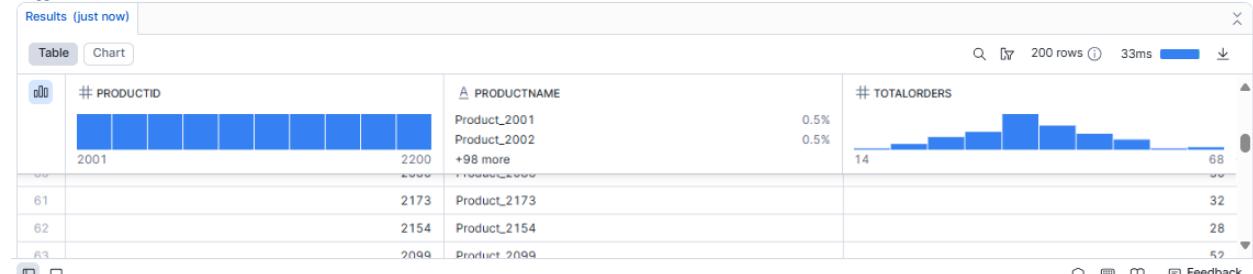ust now)   ✕

Chart   Q ▽ 8,000 rows ⓘ   26ms ▬▬▬ ⬇

# CUSTOMERID	A CUSTOMERNAME	A 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

QUESTION 4

```sql
--QUESTION 4

SELECT
    PRODUCT.PRODUCTID AS PRODUCTID,
    PRODUCT.PRODUCTNAME AS PRODUCTNAME,
    COUNT(ORDERS.ORDERID) AS TOTALORDERS
    FROM"FOOD_DATA1"."PUBLIC"."PRODUCT"
    LEFT JOIN"FOOD_DATA1"."PUBLIC"."ORDERS"
    ON PRODUCT.PRODUCTID = ORDERS.PRODUCTID
    GROUP BY
    PRODUCT.PRODUCTID,
    PRODUCT.PRODUCTNAME;
```

Results (just now)   ✕

Table   Chart   Q ▽ 200 rows ⓘ   33ms ▬▬▬ ⬇

# PRODUCTID	A PRODUCTNAME	# TOTALORDERS
2001 ▬▬▬▬▬▬▬▬▬▬ 2200	Product_2001 0.5% Product_2002 0.5% +98 more	14 ▬▬▬▬ 68
2173	Product_2173	32
2154	Product_2154	28
2099	Product_2099	52

QUESTION 5

```
84    ----------------------------------------------------------------------------------------------------
85    --QUESTION 5
86
87    SELECT
88        ORDERS.ORDERID AS ORDERID,
89        ORDERS.ORDERDATE AS ORDERDATE,
90        PRODUCT.PRODUCTID AS PRODUCTID,
91        PRODUCT.PRODUCTNAME AS PRODUCTNAME,
92        PRODUCT.PRICE AS PRICE,
93        ORDERS.QUANTITY AS QUANTITY
94        FROM"FOOD_DATA1"."PUBLIC"."ORDERS"
95        RIGHT JOIN"FOOD_DATA1"."PUBLIC"."PRODUCT"
96        ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;
```

Results (3 minutes ago)   8,000 rows 669ms

| Table | Chart |

	# ORDERID	ⓘ ORDERDATE	# PRODUCTID	A PRODUCTNAME	# PRICE	# QUANTITY
1	1	2023-06-10	2014	Product_2014	522	10
2	2	2023-12-07	2004	Product_2004	1996	5
3	3	2024-10-26	2171	Product_2171	76	9
4	4	2023-02-17	2007	Product_2007	156	2
5	5	2024-11-06	2061	Product_2061	1595	2

QUESTION 6

```
99
100   SELECT
101       CUSTOMERS.CUSTOMERID AS CUSTOMERID,
102       CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,
103       CUSTOMERS.COUNTRY AS COUNTRY,
104       ORDERS.ORDERID AS ORDERID,
105       ORDERS.ORDERDATE AS ORDERDATE,
106       ORDERS.PRODUCTID AS PRODUCTID,
107       ORDERS.QUANTITY AS QUANTITY,
108       FROM"FOOD_DATA1"."PUBLIC"."ORDERS"
109       RIGHT JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"
110       ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;
111   ----------------------------------------------------------------------------------------------------
```

Results (just now)   8,000 rows 582ms

| Table | Chart |

	# CUSTOMERID	A CUSTOMERNAME	A 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

QUESTION 7

```
112     --QUESTION 7
113
114     SELECT
115       CUSTOMERS.CUSTOMERID AS CUSTOMERID,
116       CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,
117       CUSTOMERS.COUNTRY AS COUNTRY,
118       ORDERS.ORDERID AS ORDERID,
119       ORDERS.ORDERDATE AS ORDERDATE,
120       ORDERS.PRODUCTID AS PRODUCTID,
121       ORDERS.QUANTITY AS QUANTITY,
122       FROM"FOOD_DATA1"."PUBLIC"."ORDERS"
123       FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"
124      ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;
```

Results (just now)

Table | Chart   🔍 ⛁ 8,000 rows ⓘ 24ms ▬▬ ⬇

	# CUSTOMERID	A CUSTOMERNAME	A 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

QUESTION 8

```
125     --------------------------------------------------------------------------------------------
126     --QUESTION 8
127     SELECT
128         product.productid AS productid,
129         product.productname AS productname,
130         product.price AS price,
131         orders.orderid AS orderid,
132         orders.orderdate AS orderdate,
133         orders.customerid AS customerid,
134         orders.quantity AS quantity
135     FROM "FOOD_DATA1"."PUBLIC"."PRODUCT" AS product
136     FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."ORDERS" AS orders
137         ON product.productid = orders.productid;
138
139
140
```

Results (just now)

Table | Chart   🔍 ⛁ 8,000 rows ⓘ 631ms ▬▬ ⬇

	# PRODUCTID	A 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

SELECT

   ORDERS.ORDERID AS OrderID,

   ORDERS.ORDERDATE AS OrderDate,

   CUSTOMERS.CUSTOMERNAME AS CustomerName,

   PRODUCT.PRODUCTNAME AS ProductName,

   ORDERS.QUANTITY AS Quantity

FROM"FOOD_DATA1"."PUBLIC"."ORDERS"

```sql
INNER JOIN"FOOD_DATA1"."PUBLIC"."CUSTOMERS"

   ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID

INNER JOIN"FOOD_DATA1"."PUBLIC"."PRODUCT"

   ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;
```

--QUESTION 2

```sql
SELECT

   CUSTOMERS.CUSTOMERID AS CustomerID,

   CUSTOMERS.CUSTOMERNAME AS CustomerName,

   CUSTOMERS.COUNTRY AS Country,

   ORDERS.ORDERID AS OrderID,

   ORDERS.ORDERDATE AS OrderDate

FROM"FOOD_DATA1"."PUBLIC"."CUSTOMERS"

INNER JOIN"FOOD_DATA1"."PUBLIC"."ORDERS"

   ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;
```

 --QUESTION 3

```sql
SELECT

   CUSTOMERS.CUSTOMERID AS CustomerID,

   CUSTOMERS.CUSTOMERNAME AS CustomerName,

   CUSTOMERS.COUNTRY AS Country,

   ORDERS.ORDERID AS OrderID,

   ORDERS.ORDERDATE AS OrderDate,
```

```sql
    ORDERS.PRODUCTID AS ProductID,

    ORDERS.QUANTITY AS Quantity

FROM "FOOD_DATA1"."PUBLIC"."CUSTOMERS"

LEFT JOIN "FOOD_DATA1"."PUBLIC"."ORDERS"

    ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;
```

--QUESTION 4

```sql
SELECT

    PRODUCT.PRODUCTID AS PRODUCTID,

    PRODUCT.PRODUCTNAME AS PRODUCTNAME,

    COUNT(ORDERS.ORDERID) AS TOTALORDERS

    FROM"FOOD_DATA1"."PUBLIC"."PRODUCT"

    LEFT JOIN"FOOD_DATA1"."PUBLIC"."ORDERS"

    ON PRODUCT.PRODUCTID = ORDERS.PRODUCTID

    GROUP BY

    PRODUCT.PRODUCTID,

    PRODUCT.PRODUCTNAME;
```

--QUESTION 5

```sql
SELECT

    ORDERS.ORDERID AS ORDERID,

    ORDERS.ORDERDATE AS ORDERDATE,

    PRODUCT.PRODUCTID AS PRODUCTID,

    PRODUCT.PRODUCTNAME AS PRODUCTNAME,

    PRODUCT.PRICE AS PRICE,

    ORDERS.QUANTITY AS QUANTITY
```

```sql
FROM"FOOD_DATA1"."PUBLIC"."ORDERS"

RIGHT JOIN"FOOD_DATA1"."PUBLIC"."PRODUCT"

ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;
```

-- QUESTION 6

```sql
SELECT

 CUSTOMERS.CUSTOMERID AS CUSTOMERID,

 CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,

 CUSTOMERS.COUNTRY AS COUNTRY,

 ORDERS.ORDERID AS ORDERID,

 ORDERS.ORDERDATE AS ORDERDATE,

 ORDERS.PRODUCTID AS PRODUCTID,

 ORDERS.QUANTITY AS QUANTITY,

 FROM"FOOD_DATA1"."PUBLIC"."ORDERS"

 RIGHT JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"

 ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;
```

 --QUESTION 7

```sql
 SELECT

 CUSTOMERS.CUSTOMERID AS CUSTOMERID,

 CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,

 CUSTOMERS.COUNTRY AS COUNTRY,

 ORDERS.ORDERID AS ORDERID,

 ORDERS.ORDERDATE AS ORDERDATE,

 ORDERS.PRODUCTID AS PRODUCTID,

 ORDERS.QUANTITY AS QUANTITY,

 FROM"FOOD_DATA1"."PUBLIC"."ORDERS"
```

```sql
  FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"

 ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;
```


--QUESTION 8

```sql
SELECT

    product.productid AS productid,

    product.productname AS productname,

    product.price AS price,

    orders.orderid AS orderid,

    orders.orderdate AS orderdate,

    orders.customerid AS customerid,

    orders.quantity AS quantity

FROM "FOOD_DATA1"."PUBLIC"."PRODUCT" AS product

FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."ORDERS" AS orders

    ON product.productid = orders.productid;
```