

# PRACTICAL EXERCISE 2

Using snowflake

Q1 List all orders along with the customer name and product name.

The screenshot shows a SQL query editor with the following query:

```
10 SELECT Orderid,orderdate,customername,productname,quantity
11 FROM PRACTICAL2.PUBLIC."ORDER" AS O
12 INNER JOIN PRACTICAL2.PUBLIC.CUSTOMER AS C
13 ON O.CUSTOMERID = C.CUSTOMERID
14 INNER JOIN PRACTICAL2.PUBLIC.PRODUCTS AS P
15 ON O.PRODUCTID = P.PRODUCTID;
```

The results table shows 7 rows of data:

#	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

Query Details: Query duration 100ms, Rows 8K, Query ID 01bbf093-0000-f5e5-0...

Q2 Which customers have placed at least one order?

The screenshot shows a SQL query editor with the following query:

```
29
30
31 SELECT C.CUSTOMERID,CUSTOMERNAME,COUNTRY,ORDERID,ORDERDATE
32 FROM "PRACTICAL2"."PUBLIC"."CUSTOMER" AS C
33 INNER JOIN "PRACTICAL2"."PUBLIC"."ORDER" AS O
34 ON C.CUSTOMERID = O.CUSTOMERID;
```

The results table shows 7 rows of data:

#	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
5	1319	Customer_1319	USA	5	2024-11-06
6	1185	Customer_1185	Australia	6	2024-11-23
7	1011	Customer_1011	Germany	7	2023-07-29

Query Details: Query duration 908ms, Rows 8K, Query ID 01bbf09a-0000-f5e5-0...

Q3 List all customers and any orders they might have placed. Include customers who have not placed any orders.

The screenshot shows a SQL query editor with a dark theme. The query is as follows:

```
36 SELECT C.CUSTOMERID,CUSTOMERNAME,COUNTRY,ORDERID,ORDERDATE,PRODUCTID,QUANTITY
37 FROM PRACTICAL2.PUBLIC.CUSTOMER AS C
38 LEFT JOIN "PRACTICAL2"."PUBLIC"."ORDER" AS O
39 ON C.CUSTOMERID = O.CUSTOMERID;
40
41
```

The results are displayed in a table with the following columns: #, CUSTOMERID, CUSTOMERNAME, COUNTRY, ORDERID, ORDERDATE, PRODUCTID, and QUANTITY. The results show 6 rows of data.

#	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

Query Details: Query duration 708ms, Rows 8K, Query ID 01bbf0a4-0000-f712-0...

Q4 List all products and how many times each was ordered (if any).

The screenshot shows a SQL query editor with a dark theme. The query is as follows:

```
45 SELECT P.PRODUCTNAME,P.PRODUCTID,P.PRICE,COUNT(ORDERID) AS TOTAL_ORDER
46 FROM "PRACTICAL2"."PUBLIC".PRODUCTS AS P
47 LEFT JOIN "PRACTICAL2"."PUBLIC"."ORDER" AS O
48 ON P.PRODUCTID = O.PRODUCTID
49 GROUP BY 1,2,3;
50
```

The results are displayed in a table with the following columns: #, PRODUCTNAME, PRODUCTID, PRICE, and TOTAL\_ORDER. The results show 7 rows of data.

#	PRODUCTNAME	PRODUCTID	PRICE	TOTAL_ORDER
1	Product_2004	2004	1996	48
2	Product_2171	2171	76	30
3	Product_2007	2007	156	24
4	Product_2078	2078	333	36
5	Product_2090	2090	1682	36
6	Product_2115	2115	1585	44
7	Product_2074	2074	485	56

Query Details: Query duration 575ms, Rows 200, Query ID 01bbf0b1-0000-f7a1-00...

Q5 Find all orders along with product details, including any products that might not have been ordered

The screenshot shows a database query interface with a SQL query editor and a results table. The query is a right join between the 'ORDER' and 'PRODUCTS' tables. The results table displays 7 rows of data, including order ID, order date, product ID, product name, price, and quantity.

```
54
55
56 SELECT ORDERID, ORDERDATE, O.PRODUCTID, PRODUCTNAME, PRICE, QUANTITY
57 FROM "PRACTICAL2"."PUBLIC"."ORDER" AS O
58 RIGHT JOIN "PRACTICAL2"."PUBLIC"."PRODUCTS" AS P
59 ON O.PRODUCTID = P.PRODUCTID;
```

	# ORDERID	ORDERDATE	# PRODUCTID	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
6	6	2024-11-23	2190	Product_2190	1755	3
7	7	2023-07-29	2099	Product_2099	1674	8

Query Details: Query duration 576ms, Rows 8K, Query ID 01bbf0b9-0000-f711-00...

Q6 Which customers have made orders, and include customers even if they have never placed an order.

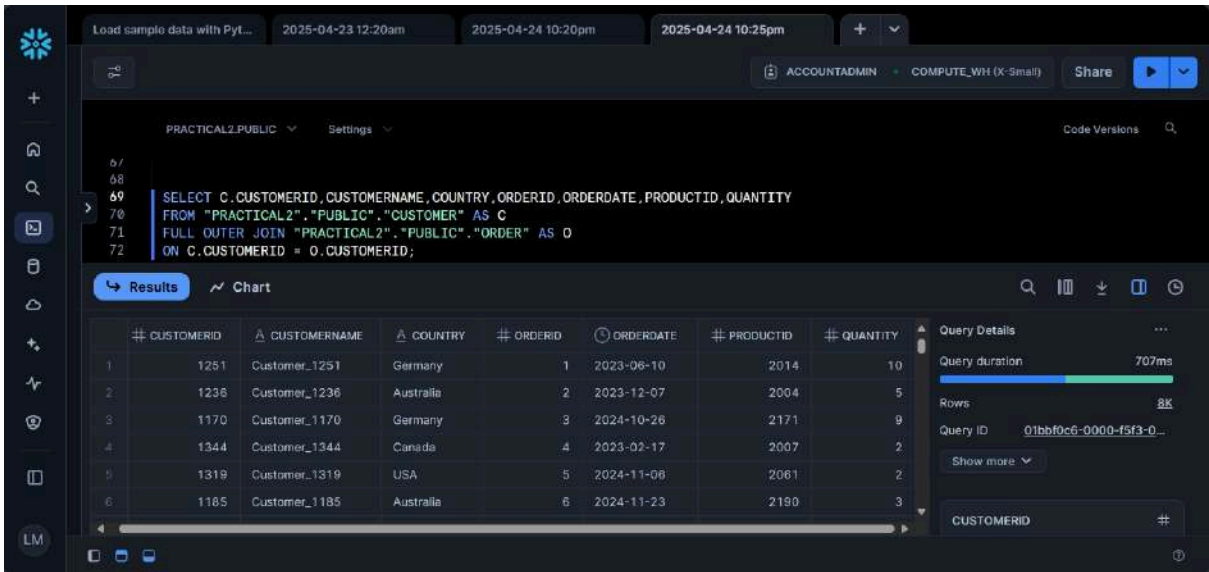
The screenshot shows a database query interface with a SQL query editor and a results table. The query is a right join between the 'CUSTOMER' and 'ORDER' tables. The results table displays 6 rows of data, including customer ID, customer name, country, order ID, order date, product ID, and quantity.

```
61
62
63 SELECT C.CUSTOMERID, CUSTOMERNAME, COUNTRY, ORDERID, ORDERDATE, PRODUCTID, QUANTITY
64 FROM "PRACTICAL2"."PUBLIC"."CUSTOMER" AS C
65 RIGHT JOIN "PRACTICAL2"."PUBLIC"."ORDER" AS O
66 ON C.CUSTOMERID = O.CUSTOMERID;
```

	# 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

Query Details: Query duration 421ms, Rows 8K, Query ID 01bbf0c1-0000-f684-0...

Q7 List all customers and orders, showing NULLs where customers have not ordered or where orders have no customer info.

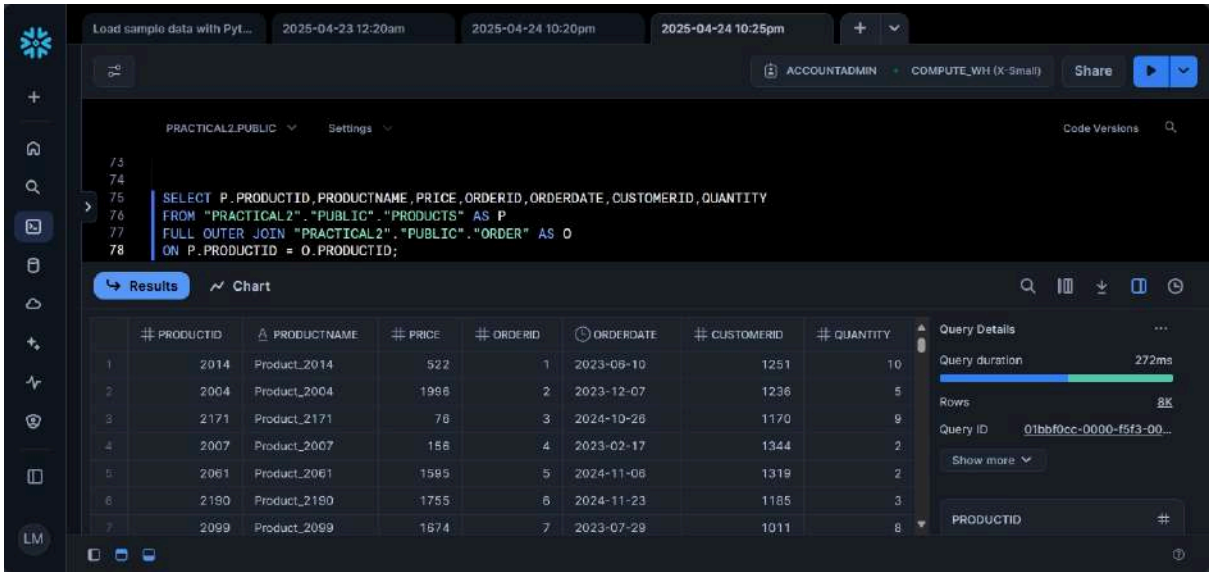


The screenshot shows a SQL query editor with a query that performs a full outer join between a customers table and an orders table. The results table displays 6 rows of data, including customer details and order information.

```
67
68
69 SELECT C.CUSTOMERID, CUSTOMERNAME, COUNTRY, ORDERID, ORDERDATE, PRODUCTID, QUANTITY
70 FROM "PRACTICAL2"."PUBLIC"."CUSTOMER" AS C
71 FULL OUTER JOIN "PRACTICAL2"."PUBLIC"."ORDER" AS O
72 ON C.CUSTOMERID = O.CUSTOMERID;
```

#	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

Q8 List all products and orders, showing NULLs where products were never ordered or orders are missing product info.



The screenshot shows a SQL query editor with a query that performs a full outer join between a products table and an orders table. The results table displays 7 rows of data, including product details and order information.

```
73
74
75 SELECT P.PRODUCTID, PRODUCTNAME, PRICE, ORDERID, ORDERDATE, CUSTOMERID, QUANTITY
76 FROM "PRACTICAL2"."PUBLIC"."PRODUCTS" AS P
77 FULL OUTER JOIN "PRACTICAL2"."PUBLIC"."ORDER" AS O
78 ON P.PRODUCTID = O.PRODUCTID;
```

#	PRODUCTID	PRODUCTNAME	PRICE	ORDERID	ORDERDATE	CUSTOMERID	QUANTITY
1	2014	Product_2014	522	1	2023-06-10	1251	10
2	2004	Product_2004	1966	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