

# Practical Exercise 2

SQL on Snowflake

# 1. INNER JOIN: Orders with Customer and Product Names

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42  
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46

--1. INNER JOIN: Orders with Customer and Product Names  
  
SELECT  
    o.orderid,  
    o.orderdate,  
    c.customername,  
    p.productname,  
    o.quantity  
FROM orders AS o  
INNER JOIN customers AS c ON c.customerid = o.customerid  
INNER JOIN products AS p ON p.productid = o.productid;

ResultsChart

ORDERID

ORDERDATE

CUSTOMERNAME

PRODUCTNAME

QUANTITY

1	2023-06-10	Customer_1251	Product_2014	10
2	2023-12-07	Customer_1236	Product_2004	5
3	2024-10-26	Customer_1170	Product_2171	9
4	2023-02-17	Customer_1344	Product_2007	2
5	2024-11-06	Customer_1319	Product_2061	2
6	2024-11-23	Customer_1185	Product_2190	3
7	2023-07-29	Customer_1011	Product_2099	8
8	2023-12-06	Customer_1322	Product_2078	7
9	2025-01-25	Customer_1224	Product_2043	7
10	2023-07-19	Customer_1010	Product_2141	3
11	2024-11-21	Customer_1324	Product_2090	1
12	2023-06-19	Customer_1248	Product_2115	6
13	2023-04-04	Customer_1315	Product_2060	10

Query Details

Query duration99ms

Rows4K

Query ID01bb5f7d-0000-8144-0...

Show more

ORDERID

ORDERDATE

## 2. INNER JOIN: Customers Who Placed Orders

```
48 --2. INNER JOIN: Customers Who Placed Orders
49
50 SELECT
51     c.customerid,
52     c.customername,
53     c.country,
54     o.orderid,
55     o.orderdate
56 FROM customers AS c
57 INNER JOIN orders AS o ON c.customerid = o.customerid
58 WHERE quantity >=1;
59
```

Results Chart

Search Filter Download Copy Refresh

	# 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
7	1011	Customer_1011	Germany	7	2023-07-29
8	1322	Customer_1322	Australia	8	2023-12-06
9	1224	Customer_1224	Australia	9	2025-01-25
10	1010	Customer_1010	UK	10	2023-07-19
11	1324	Customer_1324	India	11	2024-11-21


Query Details

Query duration 103ms

Rows 4K

Query ID 01bb5f7e-0000-8145-0...

Show more

CUSTOMERID #  
  
1001 1400

CUSTOMERNAME A  
Customer\_1354 22

### 3. LEFT JOIN: All Customers and Their Orders

```
--3. LEFT JOIN: All Customers and Their Orders

SELECT
  c.customerid,
  c.customername,
  c.country,
  o.orderid,
  o.orderdate,
  p.productid,
  o.quantity
FROM customers AS c
LEFT JOIN orders AS o ON c.customerid = o.customerid
LEFT JOIN products AS p ON o.productid = p.productid;
```

Results Chart

	#	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
11		1324	Customer_1324	India		11	2024-11-21		2090		1
12		1248	Customer_1248	Germany		12	2023-06-10		2115		6

Query Details

Query duration 80ms

Rows 4K

Query ID 01bb5f7f-0000-8145-0...

Show more

CUSTOMERID



CUSTOMERNAME

Customer\_1354 22

## 4. LEFT JOIN: Product Order Count

```
76 --4. LEFT JOIN: Product Order Count
77
78 SELECT
79     p.productid,
80     p.productname,
81     COUNT(o.productid) AS totalorders
82 FROM products AS p
83 LEFT JOIN orders as o ON p.productid = o.productid
84 GROUP BY ALL;
85
86
```

Results Chart



	#	PRODUCTID	PRODUCTNAME	#	TOTALORDERS
1		2014	Product_2014		22
2		2004	Product_2004		24
3		2171	Product_2171		15
4		2007	Product_2007		12
5		2061	Product_2061		18
6		2190	Product_2190		20
7		2099	Product_2099		26
8		2078	Product_2078		18
9		2043	Product_2043		22
10		2141	Product_2141		24
11		2090	Product_2090		18
12		2115	Product_2115		22
13		2060	Product_2060		24
14		2047	Product_2047		20
15		2155	Product_2155		15

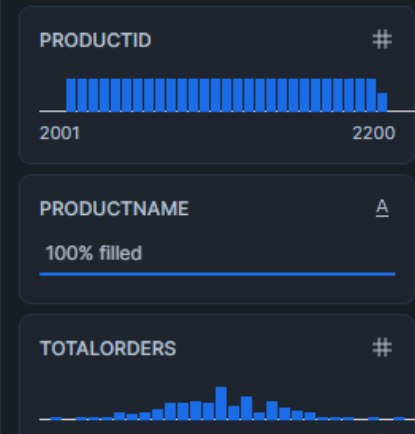
Query Details

Query duration 36ms

Rows 200

Query ID 01bb5f7f-0000-8144-0...

Show more



## 5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)

```
87 -- 5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)
88 -- Question: Find all orders along with product details, including any products that might not have been ordered.
89
90 SELECT
91     o.orderid,
92     o.orderdate,
93     p.productid,
94     p.productname,
95     p.price,
96     o.quantity
97 FROM products AS p
98 RIGHT JOIN orders AS o ON p.productid = o.productid;
99
```

Results Chart



	# 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
8	8	2023-12-06	2078	Product_2078	333	7
9	9	2025-01-25	2043	Product_2043	1947	7
10	10	2023-07-19	2141	Product_2141	1599	3
11	11	2024-11-21	2090	Product_2090	1662	1
12	12	2023-06-19	2115	Product_2115	1585	6
13	13	2023-04-04	2060	Product_2060	103	10

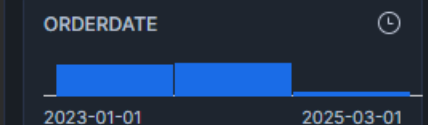
Query Details

Query duration 37ms

Rows 4K

Query ID 01bb5f82-0000-8144-0...

Show more



## 6. RIGHT JOIN: Customer Info with Orders (Include All Customers)

```
-- 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.

SELECT
  c.customerid,
  c.customername,
  c.country,
  o.orderid,
  o.orderdate,
  o.productid,
  o.quantity
FROM customers AS c
RIGHT JOIN orders AS o ON c.customerid = o.customerid;
```

Results 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
10	1010	Customer_1010	UK	10	2023-07-19	2141	3
11	1324	Customer_1324	India	11	2024-11-21	2090	1
12	1248	Customer_1248	Germany	12	2023-06-19	2115	6

Query Details

Query duration 60ms

Rows 4K

Query ID 01bb5f84-0000-8145-0...

Show more



CUSTOMERNAME A

Customer_1354	22
Customer_1024	22

## 7. FULL OUTER JOIN: All Customers and All Orders

```
118 -- 7. FULL OUTER JOIN: All Customers and All Orders
119 -- Question: List all customers and orders, showing NULLs where customers have not ordered or where orders have no customer info.
120
121 SELECT
122     c.customerid,
123     c.customername,
124     c.country,
125     o.orderid,
126     o.orderdate,
127     o.productid,
128     o.quantity
129 FROM customers AS c
130 FULL OUTER JOIN orders AS o ON c.customerid = o.customerid;
131
```

	# 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
10	1010	Customer_1010	UK	10	2023-07-19	2141	3
11	1324	Customer_1324	India	11	2024-11-21	2090	1
12	1248	Customer_1248	Germany	12	2023-06-19	2115	6

Results Chart

Query Details

Query duration 31ms

Rows 4K

Query ID 01bb5f85-0000-8145-0...

Show more

CUSTOMERID #

CUSTOMERNAME A



## 8. FULL OUTER JOIN: All Products and Orders

```
134 -- 8. FULL OUTER JOIN: All Products and Orders
135 -- Question: List all products and orders, showing NULLs where products were never ordered or orders are missing product info.
136
137 SELECT
138     p.productid,
139     p.productname,
140     p.price,
141     o.orderid,
142     o.orderdate,
143     o.customerid,
144     o.quantity
145 FROM products AS p
146 FULL OUTER JOIN orders AS o ON p.productid = o.productid;
147
```

Results

Chart

Search, Filter, Download, Copy, Refresh icons

	#	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
11		2090	Product_2090		1662		11	2024-11-21		1324		1
12		2115	Product_2115		1585		12	2023-06-19		1248		6

Query Details

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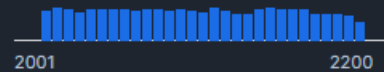
Query duration 47ms

Rows 4K

Query ID 01bb5f86-0000-8144-0...

Show more

PRODUCTID #



PRODUCTNAME A

Product\_2076 34

Product\_2041 34