

Q1

Databases Worksheets

PRACTICAL1 PRACTICAL2 RETAIL SNOWFLAKE SNOWFLAKE_LEARNING_DB SNOWFLAKE_SAMPLE_DATA STORE

```
1 --1. INNER JOIN: Orders with Customer and Product Names
2 --Question:
3 --List all orders along with the customer name and product name.
4 --Expected Output Columns:
5 -- OrderID, OrderDate, CustomerName, ProductName, Quantity
6 |
7 Select A.orderid,A.ORDERDATE, B.CUSTOMERNAME,C.PRODUCTNAME,A.QUANTITY
8 from practical2.shop.orders_large AS A
9 INNER join practical2.shop.customers_large AS B on A.customerid=B.CUSTOMERID
10 INNER JOIN PRACTICAL2.SHOP.PRODUCTS_LARGE AS C ON A.PRODUCTID=C.PRODUCTID;
11
```

Results

#	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
11	11	2024-11-21	Customer_1324	Product_2090	1
12	12	2023-06-19	Customer_1248	Product_2115	6
13	13	2023-04-04	Customer_1315	Product_2060	10
14	14	2024-11-26	Customer_1348	Product_2144	7
15	15	2023-02-23	Customer_1310	Product_2105	5
16	16	2024-04-15	Customer_1219	Product_2082	3

Q.2

Databases Worksheets

PRACTICAL1 PRACTICAL2 RETAIL SNOWFLAKE SNOWFLAKE_LEARNING_DB SNOWFLAKE_SAMPLE_DATA STORE

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12 --2. INNER JOIN: Customers Who Placed Orders
13 --Question:
14 --Which customers have placed at least one order?
15 --Expected Output Columns:
16 --- CustomerID, CustomerName, Country, OrderID, OrderDate
17 select A.customerid, B.CustomerName, B.Country, A.OrderID,A.OrderDate
18 FROM ORDERS_LARGE AS A
19 INNER JOIN CUSTOMERS_LARGE AS B on A.customerid=B.customerid
20 Inner Join products_large AS C ON A.PRODUCTID = C.PRODUCTID
21 WHERE QUANTITY>1;
22
```

Results

#	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
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	1248	Customer_1248	Germany	12	2023-06-19
12	1315	Customer_1315	Canada	13	2023-04-04
13	1348	Customer_1348	USA	14	2024-11-26
14	1310	Customer_1310	Germany	15	2023-02-23
15	1219	Customer_1219	Germany	16	2024-04-15
16	1199	Customer_1199	USA	17	2024-04-29

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Databases Worksheets

PRACTICAL1.PRACTICAL2 RETAIL SNOWFLAKE SNOWFLAKE_SAMPLE_DATA STORE

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22
23 --3. LEFT JOIN: All Customers and Their Orders
24 --Question:
25 --List all customers and any orders they might have placed. Include customers who have
26 --not placed any orders.
27 --Expected Output Columns:
28 --- CustomerID, CustomerName, Country, OrderID, OrderDate, ProductID, Quantity
29
30 select A.customerid, A.customername, A.country, B.orderid, B.orderdate, B.productid, B.quantity
31 from customers_large AS A
32 LEFT join orders_large AS B ON A.customerid=B.customerid;
33

```

Results

#	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	2023-06-19	2115	6
13	1315	Customer_1315	Canada	13	2023-04-04	2060	10
14	1348	Customer_1348	USA	14	2024-11-26	2144	7
15	1310	Customer_1310	Germany	15	2023-02-23	2105	5

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Databases Worksheets

PRACTICAL1 PRACTICAL2 RETAIL SNOWFLAKE SNOWFLAKE_SAMPLE_DATA STORE

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34 --4. LEFT JOIN: Product Order Count
35 --Question:
36 --List all products and how many times each was ordered (if any).
37 --Expected Output Columns:
38 --- ProductID, ProductName, TotalOrders
39 --(TotalOrders is the count of how many times the product appears in orders)
40
41 SELECT A.productid, A.productname, COUNT(B.orderid) AS TotalOrders
42 From products_large AS A
43 LEFT Join orders_large AS B on A.productid = B.productid
44 GROUP By A.productid, A.productname;
45

```

Results

#	PRODUCTID	PRODUCTNAME	TOTALORDERS
1	2171	Product_2171	15
2	2177	Product_2177	20
3	2073	Product_2073	19
4	2089	Product_2089	20
5	2054	Product_2054	24
6	2019	Product_2019	17
7	2190	Product_2190	20
8	2119	Product_2119	22
9	2182	Product_2182	17
10	2042	Product_2042	22
11	2169	Product_2169	18
12	2038	Product_2038	16
13	2186	Product_2186	15
14	2058	Product_2058	26
15	2174	Product_2174	13

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Databases Worksheets

PRACTICAL1 PRACTICAL2 RETAIL SNOWFLAKE SNOWFLAKE_LEARNING_DB SNOWFLAKE_SAMPLE_DATA STORE

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46
47 --5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)
48 --Question:
49 --Find all orders along with product details, including any products that might not have
50 --been ordered.
51 --Expected Output Columns:
52 --- OrderID, OrderDate, ProductID, ProductName, Price, Quantity
53
54 SELECT A.ORDERID, A.ORDERDATE, B.PRODUCTID, B.PRODUCTNAME, B.PRICE ,A.QUANTITY
55 FROM ORDERS_LARGE AS A
56 RIGHT JOIN PRODUCTS_LARGE AS B ON A.PRODUCTID = B.PRODUCTID;
57
58

```

Results Chart

# 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
11	2024-11-21	2090	Product_2090	1662	1
12	2023-06-19	2115	Product_2115	1585	6
13	2023-04-04	2060	Product_2060	103	10
14	2024-11-26	2144	Product_2144	1284	7
15	2023-02-23	2105	Product_2105	1284	5
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PRACTICAL1 PRACTICAL2 RETAIL SNOWFLAKE SNOWFLAKE_LEARNING_DB SNOWFLAKE_SAMPLE_DATA STORE

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58 --6. RIGHT JOIN: Customer Info with Orders (Include ALL Customers)
59 --Question:
60 --Which customers have made orders, and include customers even if they have never
61 --placed an order.
62 --Expected Output Columns:
63 --- CustomerID, CustomerName, Country, OrderID, OrderDate, ProductID, Quantity
64
65
66
67
68

```

SELECT B.CUSTOMERID, B.CUSTOMERNAME, B.COUNTRY, A.ORDERID, A.ORDERDATE, A.PRODUCTID, A.QUANTITY
FROM ORDERS_LARGE AS A
RIGHT JOIN CUSTOMERS_LARGE AS B ON A.CUSTOMERID=B.CUSTOMERID;

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	2023-06-19	2115	6
13	1315	Customer_1315	Canada	13	2023-04-04	2060	10
14	1348	Customer_1348	USA	14	2024-11-26	2144	7
15	1310	Customer_1310	Germany	15	2023-02-23	2105	5
16	1219	Customer_1219	Germany	16	2024-04-15	2082	3

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Databases Worksheets

PRACTICAL2.SHOP Settings

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69 --7. FULL OUTER JOIN: All Customers and All Orders
70 --Question:
71 --List all customers and orders, showing NULLs where customers have not ordered or
72 --where orders have no customer info.
73 --Expected Output Columns:
74 --- CustomerID, CustomerName, Country, OrderID, OrderDate, ProductID, Quantity
75
76 SELECT A.CUSTOMERID, A.CUSTOMERNAME, A.COUNTRY, B.ORDERID, B.ORDERDATE, B.PRODUCTID, B.QUANTITY
77 FROM CUSTOMERS_LARGE AS A
78 FULL OUTER JOIN ORDERS_LARGE AS B ON A.CUSTOMERID = B.CUSTOMERID;
79

```

Results

#	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	2023-06-19	2115	6
13	1315	Customer_1315	Canada	13	2023-04-04	2060	10
14	1348	Customer_1348	USA	14	2024-11-26	2144	7
15	1310	Customer_1310	Germany	15	2023-02-23	2105	5
16	1219	Customer_1219	Germany	16	2024-04-15	2082	3

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Databases Worksheets

PRACTICAL2.SHOP Settings

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80 --8. FULL OUTER JOIN: All Products and Orders
81 --Question:
82 --List all products and orders, showing NULLs where products were never ordered or
83 --orders are missing product info.
84 --Expected Output Columns:
85 --- ProductID, ProductName, Price, OrderID, OrderDate, CustomerID, Quantity
86
87 SELECT A.PRODUCTID, A.PRODUCTNAME, A.PRICE, B.ORDERID, B.ORDERDATE, B.CUSTOMERID, B.QUANTITY
88 FROM PRODUCTS_LARGE AS A
89 FULL OUTER JOIN ORDERS_LARGE AS B ON A.PRODUCTID = B.PRODUCTID;
90

```

Results

#	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
13	2060	Product_2060	103	13	2023-04-04	1315	10
14	2144	Product_2144	1284	14	2024-11-26	1348	7
15	2105	Product_2105	1284	15	2023-02-23	1310	5
16	2082	Product_2082	500	16	2024-04-15	1219	3