

BrightLight Data Analytics

SQL JOIN Practice

```
1  ---1. List all orders along with the customer name and product name.
2  SELECT
3      OrderID,
4      OrderDate,
5      CustomerName,
6      ProductName,
7      Quantity
8  FROM ORDERS.ORDERSLARGE.LARGEORDERS AS A
9  INNER JOIN CUSTOMERS.CUSTOMERLARGE.LARGECUSTOMERS AS B ON A.CustomerID = B.CustomerID
10 INNER JOIN PRODUCTS.PRODUCTSLARGE.LARGEPRODUCTS AS C ON A.ProductID = C.ProductID;
11
```

Results Chart

# 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

```
12  ---2. Which customers have placed at least one order
13  SELECT
14      A.CUSTOMERID,
15      CustomerName,
16      Country,
17      OrderID,
18      OrderDate
19  FROM CUSTOMERS.CUSTOMERLARGE.LARGECUSTOMERS AS A
20  INNER JOIN ORDERS.ORDERSLARGE.LARGEORDERS AS B ON A.CUSTOMERID = B.CUSTOMERID;
21
```

Results Chart

# CUSTOMERID	▲ CUSTOMERNAME	▲ COUNTRY	# ORDERID	⌚ ORDERDATE
1251	Customer_1251	Germany	1	2023-06-10
1236	Customer_1236	Australia	2	2023-12-07
1170	Customer_1170	Germany	3	2024-10-26
1344	Customer_1344	Canada	4	2023-02-17
1319	Customer_1319	USA	5	2024-11-06
1185	Customer_1185	Australia	6	2024-11-23
1011	Customer_1011	Germany	7	2023-07-29
1322	Customer_1322	Australia	8	2023-12-06
1224	Customer_1224	Australia	9	2025-01-25
1010	Customer_1010	UK	10	2023-07-19
1324	Customer_1324	India	11	2024-11-21
1248	Customer_1248	Germany	12	2023-06-19
1315	Customer_1315	Canada	13	2023-04-04

```

22  ---3. List all customers and any orders they might have placed. Include customers who have not placed any orders.
23  SELECT
24      A.CUSTOMERID,
25      CustomerName,
26      Country,
27      OrderID,
28      OrderDate,
29      ProductID,
30      Quantity
31  FROM CUSTOMERS.CUSTOMERLARGE.LARGECUSTOMERS AS A
32  LEFT JOIN ORDERS.ORDERSLARGE.LARGEORDERS AS B ON A.CustomerID = B.CustomerID;
33

```

↳ 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

```

34  ---4. List all products and how many times each was ordered (if any).
35  SELECT
36      A.PRODUCTID,
37      ProductName,
38      COUNT(OrderID) AS TotalOrders
39  FROM PRODUCTS.PRODUCTSLARGE.LARGEPRODUCTS AS A
40  LEFT JOIN ORDERS.ORDERSLARGE.LARGEORDERS AS B ON A.ProductID = B.ProductID
41  GROUP BY A.ProductID, A.ProductName;
42

```

↳ Results ↵ Chart

	# 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
0	2042	Product_2042	22
1	2169	Product_2169	18
2	2038	Product_2038	16
3	2186	Product_2186	15
4	2058	Product_2058	26

```

43  ---5. Find all orders along with product details, including any products that might not have been ordered.
44  SELECT
45      OrderID,
46      OrderDate,
47      A.PRODUCTID,
48      ProductName,
49      Price,
50      Quantity
51  FROM ORDERS.ORDERSLARGE.LARGEORDERS AS A
52  RIGHT JOIN PRODUCTS.PRODUCTSLARGE.LARGEPRODUCTS AS B ON A.ProductID = B.ProductID;
53

```

↳ 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

```

54  ---6. Which customers have made orders, and include customers even if they have never placed an order.
55  SELECT
56      A.CUSTOMERID,
57      CustomerName,
58      Country,
59      OrderID,
60      OrderDate,
61      ProductID,
62      Quantity
63  FROM ORDERS.ORDERSLARGE.LARGEORDERS AS A
64  RIGHT JOIN CUSTOMERS.CUSTOMERLARGE.LARGECUSTOMERS 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

```

66  ---7. List all customers and orders, showing NULLs where customers have not ordered or where orders have no customer info.
67
68  SELECT
69      A.CUSTOMERID,
70      CustomerName,
71      Country,
72      OrderID,
73      OrderDate,
74      ProductID,
75      Quantity
76  FROM CUSTOMERS.CUSTOMERLARGE.LARGECUSTOMERS AS A
77  FULL OUTER JOIN ORDERS.ORDERSLARGE.LARGEORDERS AS B ON A.CustomerID = B.CustomerID;
78

```

↳ 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

```

79  ---8. List all products and orders, showing NULLs where products were never ordered or orders are missing product info.
80  SELECT
81      A.PRODUCTID,
82      ProductName,
83      Price,
84      OrderID,
85      OrderDate,
86      CustomerID,
87      Quantity
88  FROM PRODUCTS.PRODUCTSLARGE.LARGEPRODUCTS AS A
89  FULL OUTER JOIN ORDERS.ORDERSLARGE.LARGEORDERS AS B ON A.ProductID = B.ProductID;
90

```

↳ Results ↵ Chart

#	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	4047	9	2025-01-25	1224	7