

# Gugulethu Dlamini

## Practical 2:

### Question 1:

```
--1.List all orders along with the customer name and product name.
1  SELECT
2  o.OrderID,
3  o.OrderDate,
4  c.CustomerName,
5  p.ProductName,
6  o.Quantity
7  FROM orders_large.public.orders AS o
8  INNER JOIN customers.public.customers AS c ON o.CustomerID = c.CustomerID
9  INNER JOIN products.public.products AS p ON o.ProductID = p.ProductID;
10
11
```

#	ORDERID	ORDERDATE	CUSTOMERNAME	PRODUCTNAME	QUANTITY
1	1	2023-06-10	Customer_1251	Product_2014	10
2	1	2023-06-10	Customer_1251	Product_2014	10
3	2	2023-12-07	Customer_1236	Product_2004	5
4	2	2023-12-07	Customer_1236	Product_2004	5
5	3	2024-10-26	Customer_1170	Product_2171	9
6	3	2024-10-26	Customer_1170	Product_2171	9
7	4	2023-02-17	Customer_1344	Product_2007	2
8	4	2023-02-17	Customer_1344	Product_2007	2
9	5	2024-11-06	Customer_1319	Product_2061	2
10	5	2024-11-06	Customer_1319	Product_2061	2
11	6	2024-11-23	Customer_1185	Product_2190	3

### Question 2:

```
--2.Which customers have placed at least one order?
13 SELECT
14 c.CustomerID,
15 c.CustomerName,
16 c.Country,
17 o.OrderID,
18 o.OrderDate
19 FROM customers.public.customers AS c
20 INNER JOIN orders_large.public.orders AS o ON c.CustomerID = o.CustomerID;
21
22
```

#	CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE
1	1251	Customer_1251	Germany	1	2023-06-10
2	1251	Customer_1251	Germany	1	2023-06-10
3	1236	Customer_1236	Australia	2	2023-12-07
4	1236	Customer_1236	Australia	2	2023-12-07
5	1170	Customer_1170	Germany	3	2024-10-26
6	1170	Customer_1170	Germany	3	2024-10-26
7	1344	Customer_1344	Canada	4	2023-02-17
8	1344	Customer_1344	Canada	4	2023-02-17
9	1319	Customer_1319	USA	5	2024-11-06
10	1319	Customer_1319	USA	5	2024-11-06
11	1185	Customer_1185	Australia	6	2024-11-23

### Question 3:

```
23 --3.List all customers and any orders they might have placed. Include customers who have not placed any orders.
24 SELECT
25     c.CustomerID,
26     c.CustomerName,
27     c.Country,
28     o.OrderID,
29     o.OrderDate,
30     o.ProductID,
31     o.Quantity
32 FROM customers.public.customers AS c
33 LEFT JOIN orders_large.public.orders AS o ON c.CustomerID = o.CustomerID;
34
```

ResultsChart

#	CUSTOMERID	CUSTOMERNAME	COUNTRY	#	ORDERID	ORDERDATE	#	PRODUCTID	QUANTITY
1	1251	Customer_1251	Germany	1	2023-06-10		2014	10	
2	1251	Customer_1251	Germany	1	2023-06-10		2014	10	
3	1236	Customer_1236	Australia	2	2023-12-07		2004	5	
4	1236	Customer_1236	Australia	2	2023-12-07		2004	5	
5	1170	Customer_1170	Germany	3	2024-10-26		2171	9	
6	1170	Customer_1170	Germany	3	2024-10-26		2171	9	
7	1344	Customer_1344	Canada	4	2023-02-17		2007	2	
8	1344	Customer_1344	Canada	4	2023-02-17		2007	2	
9	1319	Customer_1319	USA	5	2024-11-06		2061	2	
10	1319	Customer_1319	USA	5	2024-11-06		2061	2	
11	1185	Customer_1185	Australia	6	2024-11-23		2190	3	

Query Details

Query duration194ms

Rows8K

Query ID01c02c09-000c-b2eb-0...

Show more

CUSTOMERID#

10011400

CUSTOMERNAMEA

### Question 4:

```
35 --4.List all products and how many times each was ordered (if any).
36 SELECT
37     p.ProductID,
38     p.ProductName,
39     COUNT(o.OrderID) AS TotalOrders
40 FROM products.public.products AS p
41 LEFT JOIN orders_large.public.orders AS o ON p.ProductID = o.ProductID
42 GROUP BY p.ProductID, p.ProductName;
43
```

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	
10	2042	Product_2042	22	
11	2169	Product_2169	18	

Query Details

Query duration 116ms

Rows 200

Query ID 01c02c0b-000c-b2eb-0...

Show more

PRODUCTID #

2001 2200

PRODUCTNAME

### Question 5:

--5.Find all orders along with product details, including any products that might not have been ordered.  
SELECT  
o.OrderID,  
o.OrderDate,  
p.ProductID,  
p.ProductName,  
p.Price,  
o.Quantity  
FROM orders\_large.public.orders AS o  
RIGHT JOIN products.public.products AS p ON o.ProductID = p.ProductID;

ResultsChart

#	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

Query Details

Query duration190ms

Rows4K

Query ID01c02c0d-000c-b2eb-0...

Show more

ORDERID

CUSTOMERID

ORDERDATE

### Question 6:

--6.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 orders\_large.public.orders AS o  
RIGHT JOIN customers.public.customers AS c ON o.CustomerID = c.CustomerID;

ResultsChart

#	CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE	PRODUCTID	QUANTITY
1	1251	Customer_1251	Germany	1	2023-06-10	2014	10
2	1251	Customer_1251	Germany	1	2023-06-10	2014	10
3	1236	Customer_1236	Australia	2	2023-12-07	2004	5
4	1236	Customer_1236	Australia	2	2023-12-07	2004	5
5	1170	Customer_1170	Germany	3	2024-10-26	2171	9
6	1170	Customer_1170	Germany	3	2024-10-26	2171	9
7	1344	Customer_1344	Canada	4	2023-02-17	2007	2
8	1344	Customer_1344	Canada	4	2023-02-17	2007	2
9	1319	Customer_1319	USA	5	2024-11-06	2061	2
10	1319	Customer_1319	USA	5	2024-11-06	2061	2
11	1185	Customer_1185	Australia	6	2024-11-23	2190	3

Query Details

Query duration182ms

Rows8K

Query ID01c02c0f-000c-b2eb-0...

Show more

CUSTOMERID

CUSTOMERNAME

### Question 7:

```
67 --7.List all customers and orders, showing NULLs where customers have not ordered or where orders have no customer info.
68 SELECT
69     c.CustomerID,
70     c.CustomerName,
71     c.Country,
72     o.OrderID,
73     o.OrderDate,
74     o.ProductID,
75     o.Quantity
76 FROM customers.public.customers AS c
77 FULL OUTER JOIN orders_large.public.orders AS o ON c.CustomerID = o.CustomerID;
78
79 --8
```

Results Chart

	# CUSTOMERID	Δ CUSTOMERNAME	Δ COUNTRY	# ORDERID	🕒 ORDERDATE	# PRODUCTID	# QUANTITY
1	1251	Customer_1251	Germany	1	2023-06-10	2014	10
2	1251	Customer_1251	Germany	1	2023-06-10	2014	10
3	1236	Customer_1236	Australia	2	2023-12-07	2004	5
4	1236	Customer_1236	Australia	2	2023-12-07	2004	5
5	1170	Customer_1170	Germany	3	2024-10-26	2171	9
6	1170	Customer_1170	Germany	3	2024-10-26	2171	9
7	1344	Customer_1344	Canada	4	2023-02-17	2007	2
8	1344	Customer_1344	Canada	4	2023-02-17	2007	2
9	1319	Customer_1319	USA	5	2024-11-06	2061	2
10	1319	Customer_1319	USA	5	2024-11-06	2061	2
11	1185	Customer_1185	Australia	6	2024-11-23	2190	3

Query Details

Query duration 183ms

Rows 8K

Query ID 01c02c10-000c-b2eb-0...

Show more

CUSTOMERID #

CUSTOMERNAME Δ

## Question 8:

```
78
79 --8.List all products and orders, showing NULLs where products were never ordered or orders are missing product info.
80 SELECT
81     p.ProductID,
82     p.ProductName,
83     p.Price,
84     o.OrderID,
85     o.OrderDate,
86     o.CustomerID,
87     o.Quantity
88 FROM products.public.products AS p
89 FULL OUTER JOIN orders_large.public.orders AS o ON p.ProductID = o.ProductID;
90
```

Results Chart

	# PRODUCTID	Δ 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	2000	Product_2000	1622	11	2024-11-21	1324	4

Query Details

Query duration 205ms

Rows 4K

Query ID 01c02c13-000c-b2eb-0...

Show more

PRODUCTID #

PRODUCTNAME Δ