SQL JOIN Assignment (No Aggregation)

Instructions: For each question, write an SQL query using the specified JOIN type on the provided PostgreSQL schema. Produce output similar to the sample shown. Use ISO date formats (YYYY-MM-DD) where applicable.

Q1: INNER JOIN

Show all purchase orders along with the supplier name who provided them.

po_id	po_date	status	supplier_name
1	2025-11-01	Open	Supplier 1
2	2025-11-02	Approved	Supplier 2

Q2: LEFT JOIN

Show all customers and any sales orders they have placed. Include customers who have not placed any orders.

customer_name	sales_order_id	order_date
Customer 1	1	2025-11-10
Customer 2	2	2025-11-11
Customer 3	NULL	NULL

Q3: RIGHT JOIN

Show all sales orders and the name of the customer who placed them. Include orders even if customer info is missing.

sales_order_id	order_date	customer_name
1	2025-11-10	Customer 1
2	2025-11-11	Customer 2

Q4: FULL OUTER JOIN

Show all suppliers and all warehouses together. Include suppliers without warehouses and warehouses without suppliers.

supplier_name	warehouse_name
Supplier 1	Warehouse 1
Supplier 2	Warehouse 2
Supplier 3	NULL

Q5: INNER JOIN

Show each sales order along with its shipment details (shipment date and status).

sales_order_id	order_date	shipment_date	shipment_status
1	2025-11-10	2025-11-12	Processing

Q6: LEFT JOIN

Show all warehouses and the inventory stored in them. Include warehouses with no inventory.

warehouse_name	product_id	quantity_on_hand
Warehouse 1	101	50
Warehouse 2	NULL	NULL

Q7: FULL OUTER JOIN

Show all purchase orders and all purchase order items together. Include orders without items and items without orders.

po_id	po_item_id
1	1
1	2
2	NULL

Q8: INNER JOIN

Show each customer along with the products they ordered and the quantity.

customer_name	product_id	quantity
Customer 1	101	2
Customer 1	102	1

Q9: LEFT JOIN

Show all suppliers and the purchase orders linked to them. Include suppliers with no purchase orders.

supplier_name	po_id	status
Supplier 1	1	Open
Supplier 5	NULL	NULL

Q10: RIGHT JOIN

Show all warehouses and any inventory linked to them. Include warehouses even if inventory is missing.

warehouse_name	product_id
Warehouse 1	101
Warehouse 5	NULL

Q11: FULL OUTER JOIN

Show all customers and all suppliers together. Include unmatched rows from both sides.

customer_name	supplier_name
Customer 1	Supplier 1
Customer 5	NULL

Q12: INNER JOIN

Show all shipments along with the warehouse name from which they were shipped.

shipment_id	warehouse_name	shipment_status
1	Warehouse 1	Processing

Q13: LEFT JOIN

Show all sales orders and their shipment dates. Include orders that have not been shipped yet.

sales_order_id	shipment_date
1	2025-11-12
5	NULL

Q14: RIGHT JOIN

Show all purchase orders and the supplier names. Include orders even if supplier info is missing.

po_id	supplier_name
1	Supplier 1
5	NULL

Q15: FULL OUTER JOIN

Show all sales orders and all purchase orders together. Include unmatched rows from both sides.

sales_order_id	po_id
1	NULL
NULL	1

Q16: INNER JOIN

Show inventory details along with the purchase order item price for the same product.

product_id	unit_price
101	250.00

Q17: LEFT JOIN

Show all customers and the shipment status of their orders. Include customers without shipments.

customer_name	shipment_status
Customer 1	Processing
Customer 5	NULL

Q18: RIGHT JOIN

Show all warehouses and the shipment status of orders shipped from them. Include warehouses with no shipments.

warehouse_name	shipment_status
Warehouse 1	Processing
Warehouse 5	NULL

Q19: FULL OUTER JOIN

Show all inventory items and all sales order items together. Include unmatched rows from both sides.

product_id	quantity
101	2
105	NULL

Q20: INNER JOIN

Show all purchase order items along with the purchase order details (order date and status).

po_item_id	po_id	po_date	status
1	1	2025-11-01	Open