**DAY 4 Assignment**

1.     List all customers and the products they ordered with the order date. (Inner join)

Tables used: customers, orders, order\_details, products

Output should have below columns:

    companyname AS customer,   orderid,  productname,  quantity, orderdate

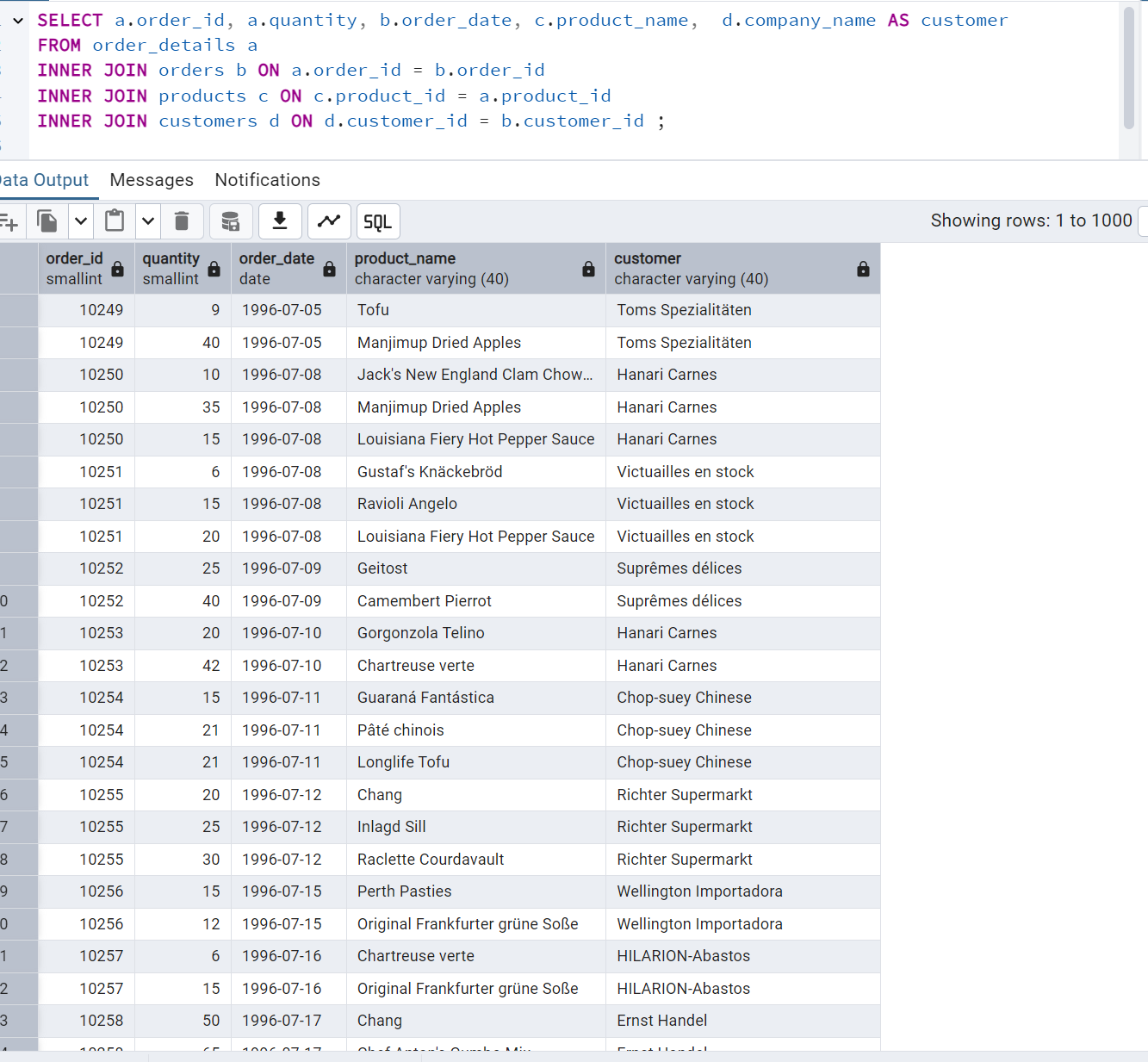
SELECT a.order\_id, a.quantity, b.order\_date, c.product\_name, d.company\_name AS customer

FROM order\_details a

INNER JOIN orders b ON a.order\_id = b.order\_id

INNER JOIN products c ON c.product\_id = a.product\_id

INNER JOIN customers d ON d.customer\_id = b.customer\_id ;



2.     Show each order with customer, employee, shipper, and product info — even if some parts are missing. (Left Join)

**Tables used: orders, customers, employees, shippers, order\_details, products**

SELECT o.order\_id, p.product\_name, s.company\_name, c.contact\_name,

concat(e.first\_name,' ', e.last\_name) as employee\_name, d.quantity FROM orders o

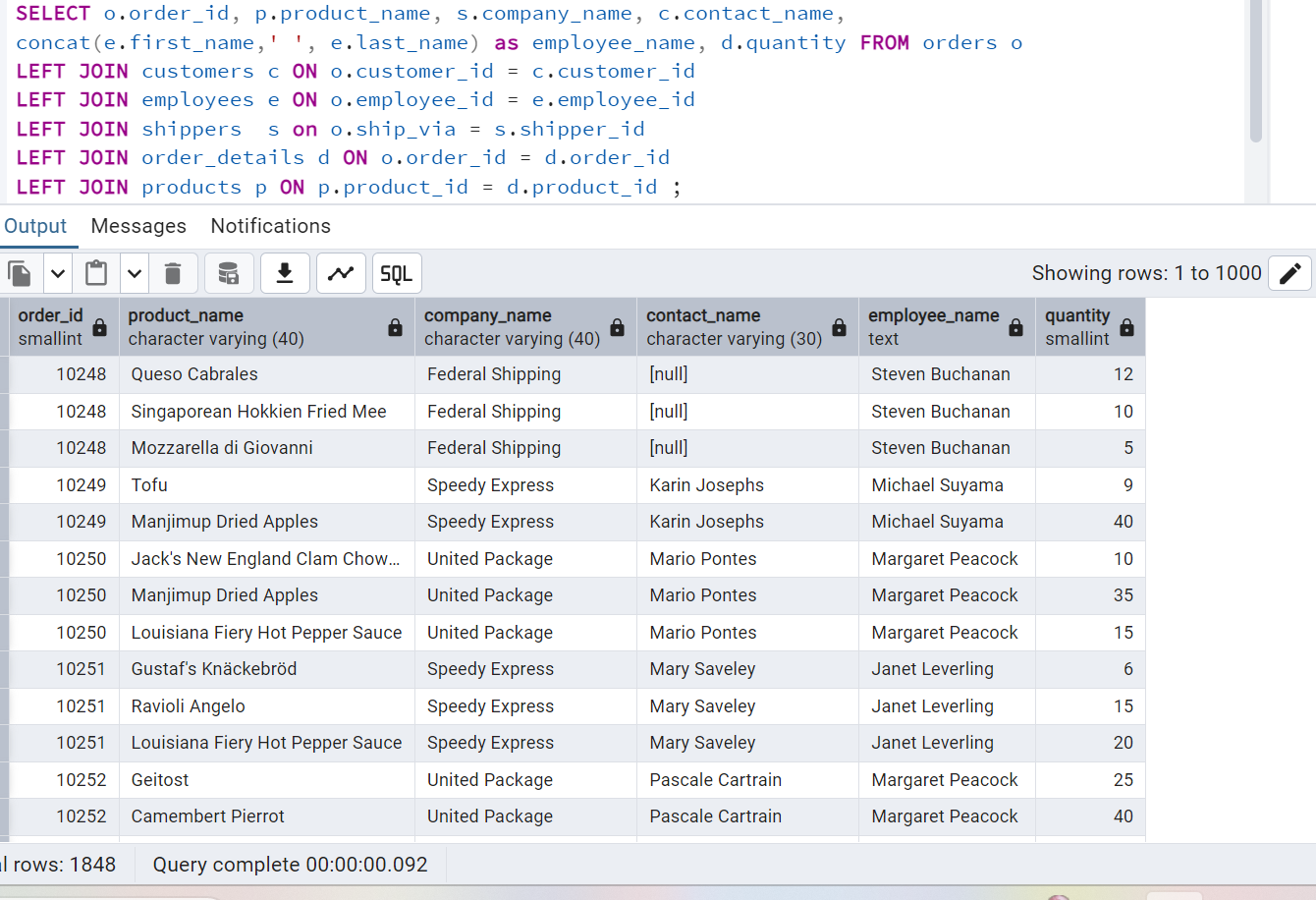
LEFT JOIN customers c ON o.customer\_id = c.customer\_id

LEFT JOIN employees e ON o.employee\_id = e.employee\_id

LEFT JOIN shippers s on o.ship\_via = s.shipper\_id

LEFT JOIN order\_details d ON o.order\_id = d.order\_id

LEFT JOIN products p ON p.product\_id = d.product\_id ;



3.     Show all order details and products (include all products even if they were never ordered). (Right Join)

**Tables used: order\_details, products**

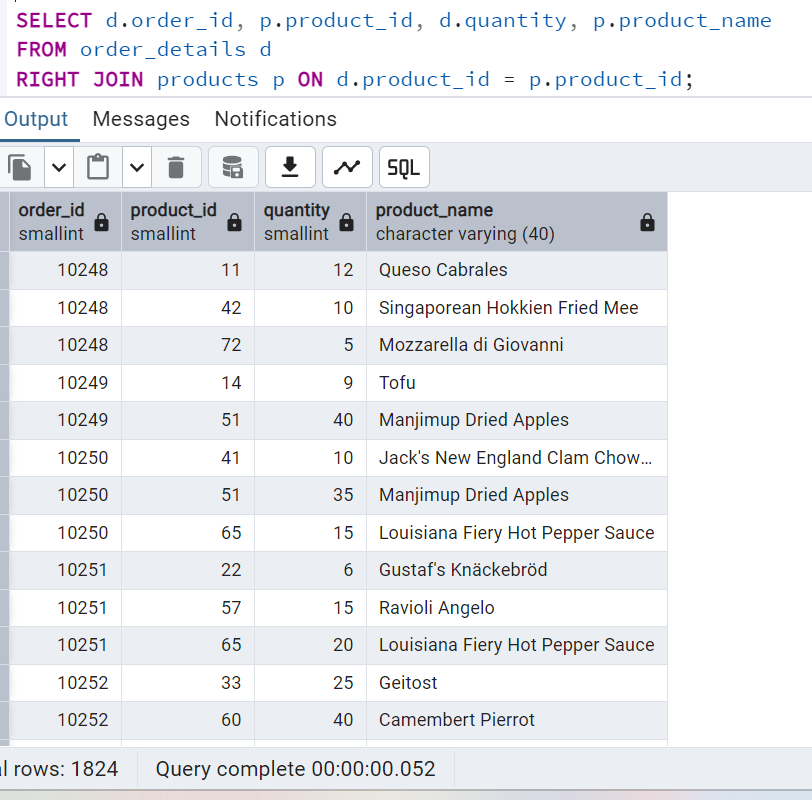
**Output should have below columns:**

    orderid, productid, quantity, productname

SELECT d.order\_id, p.product\_id, d.quantity, p.product\_name

FROM order\_details d

RIGHT JOIN products p ON d.product\_id = p.product\_id;

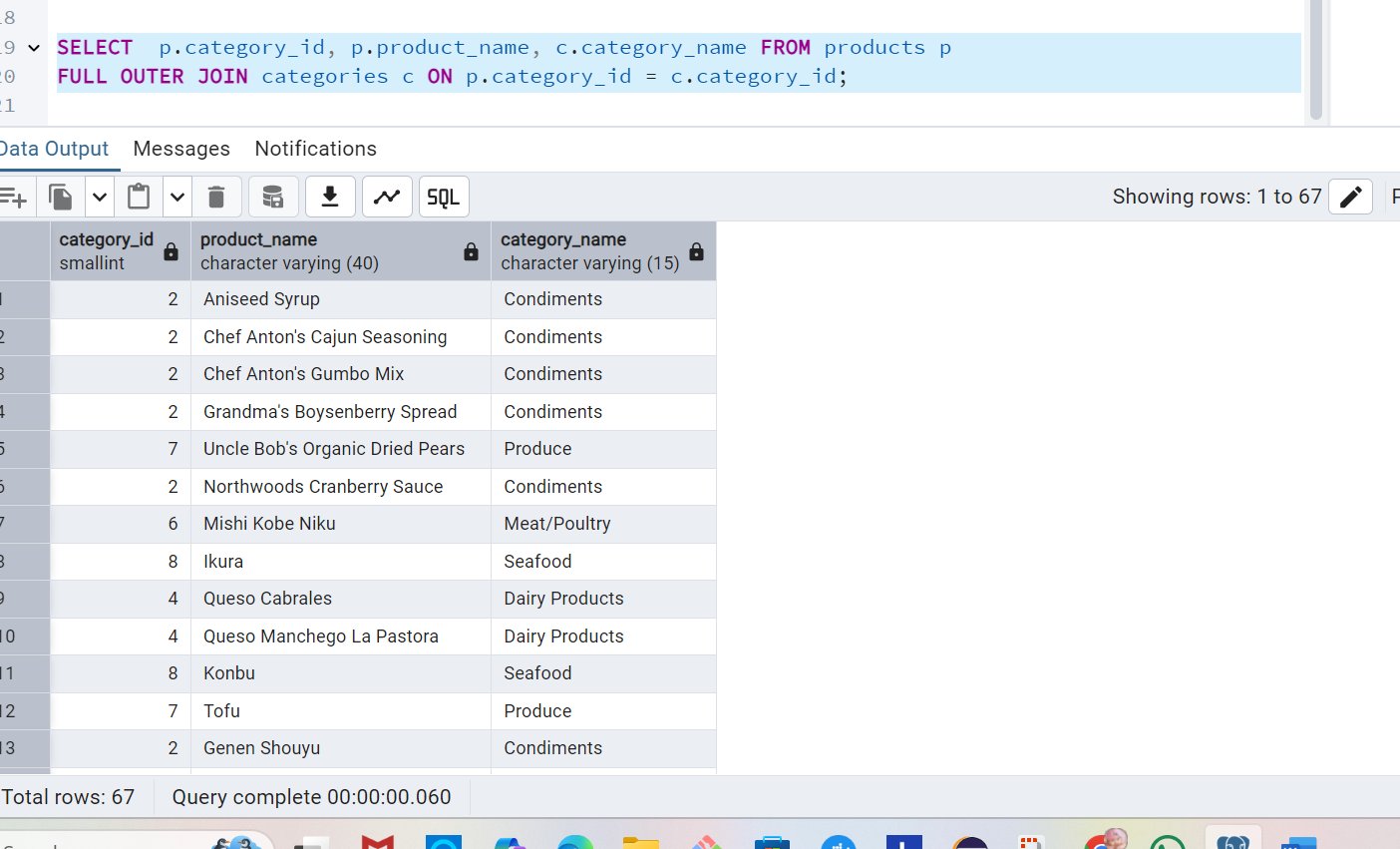


4. List all product categories and their products — including categories that have no products, and products that are not assigned to any category.(Outer Join)

**Tables used: categories, products**

SELECT p.category\_id, p.product\_name, c.category\_name FROM products p

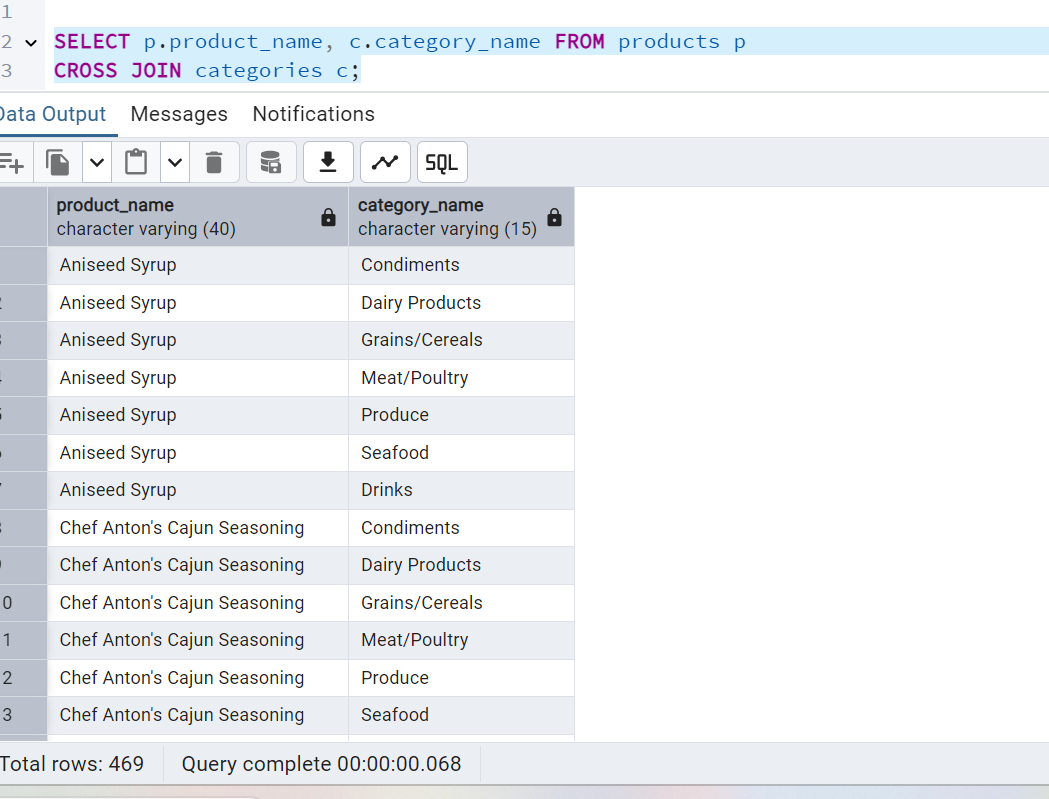
FULL OUTER JOIN categories c ON p.category\_id = c.category\_id;



5. Show all possible product and category combinations (Cross join).

SELECT p.product\_name, c.category\_name FROM products p

CROSS JOIN categories c;



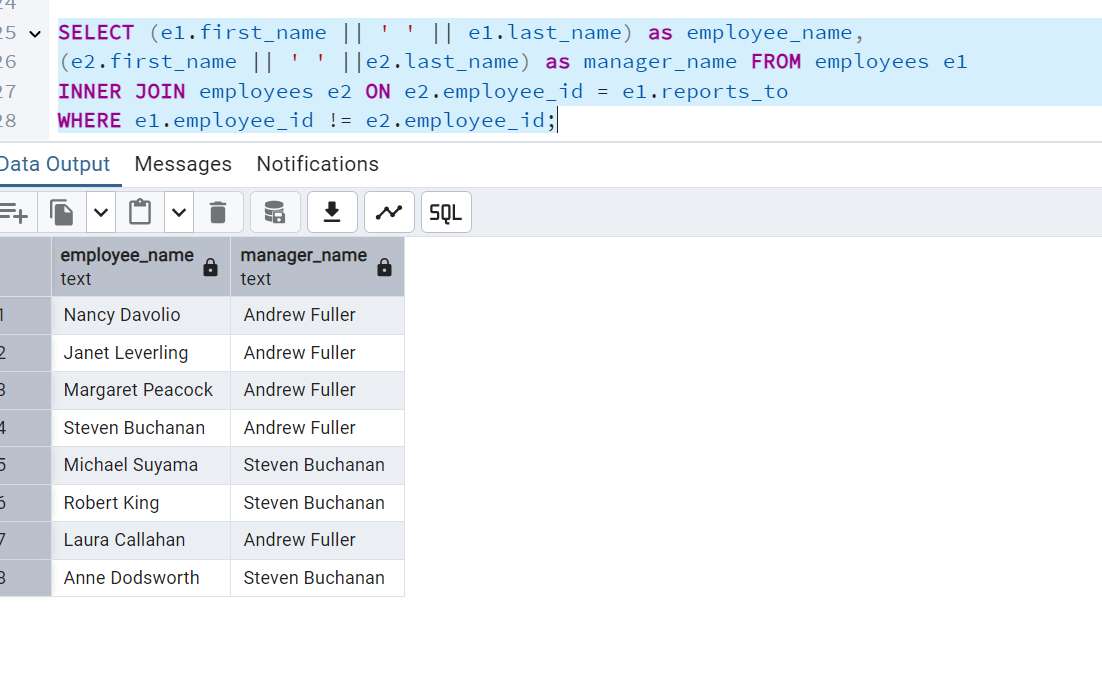
6. Show all employees who have the same manager(Self join)

SELECT (e1.first\_name || ' ' || e1.last\_name) as employee\_name,

(e2.first\_name || ' ' ||e2.last\_name) as manager\_name FROM employees e1

INNER JOIN employees e2 ON e2.employee\_id = e1.reports\_to

WHERE e1.employee\_id != e2.employee\_id;



7. List all customers who have not selected a shipping method.

**Tables used:** customers, orders

**(Left Join, WHERE o.shipvia IS NULL)**

**SELECT o.order\_id, c.contact\_name, c.customer\_id,o.order\_date FROM customers c**

**LEFT JOIN orders o ON c.customer\_id = o.customer\_id**

**WHERE o.ship\_via IS NULL;**

