**DAY 4**

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

**Ans**:

**Query**:

**select c.company\_name AS customer,**

**o.order\_id, o.order\_date,**

**od.quantity,**

**p.product\_name**

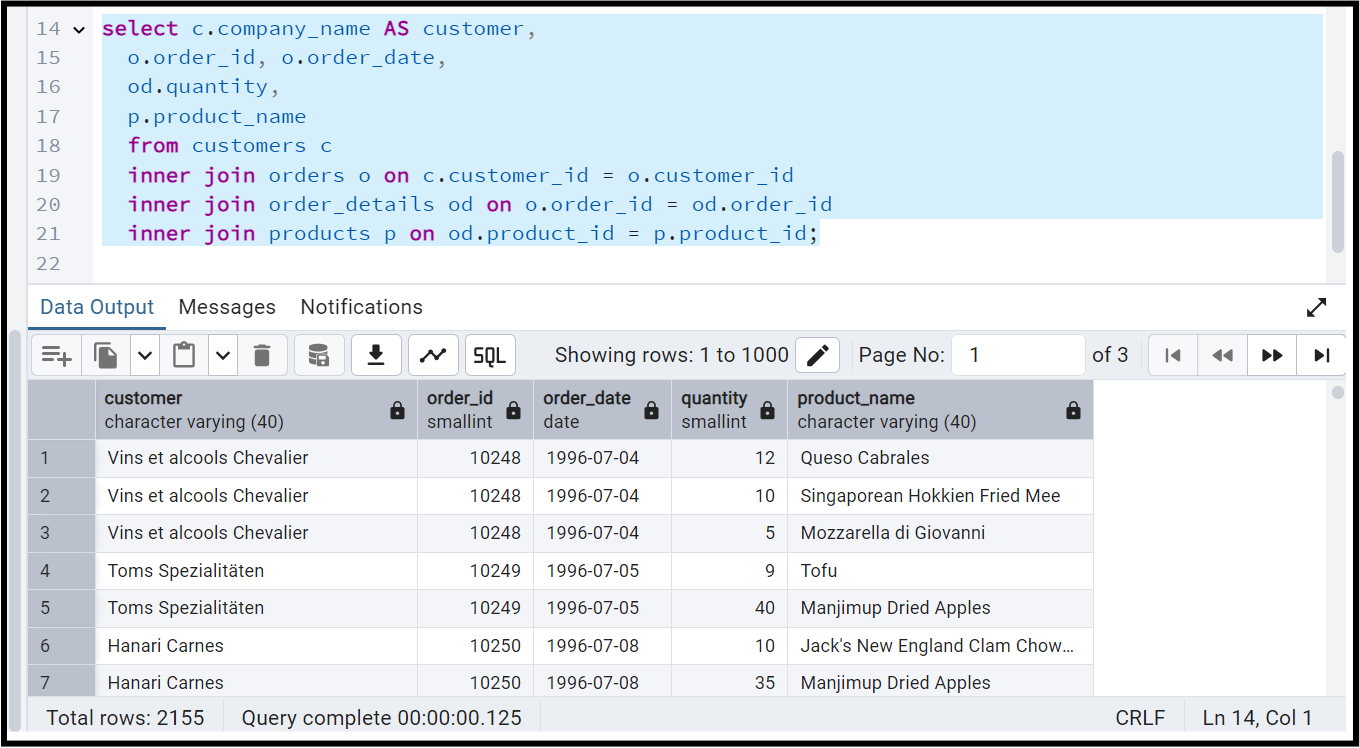
**from customers c**

**inner join orders o on c.customer\_id = o.customer\_id**

**inner join order\_details od on o.order\_id = od.order\_id**

**inner join products p on od.product\_id = p.product\_id;**

Output:



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**

**Query:**

select o.order\_id, o.order\_date,

o.required\_date,o.ship\_via,o.freight,

c.company\_name AS customer,

e.first\_name ||' '||e.last\_name as emp\_fullname, e.title,

od.quantity,

p.product\_name

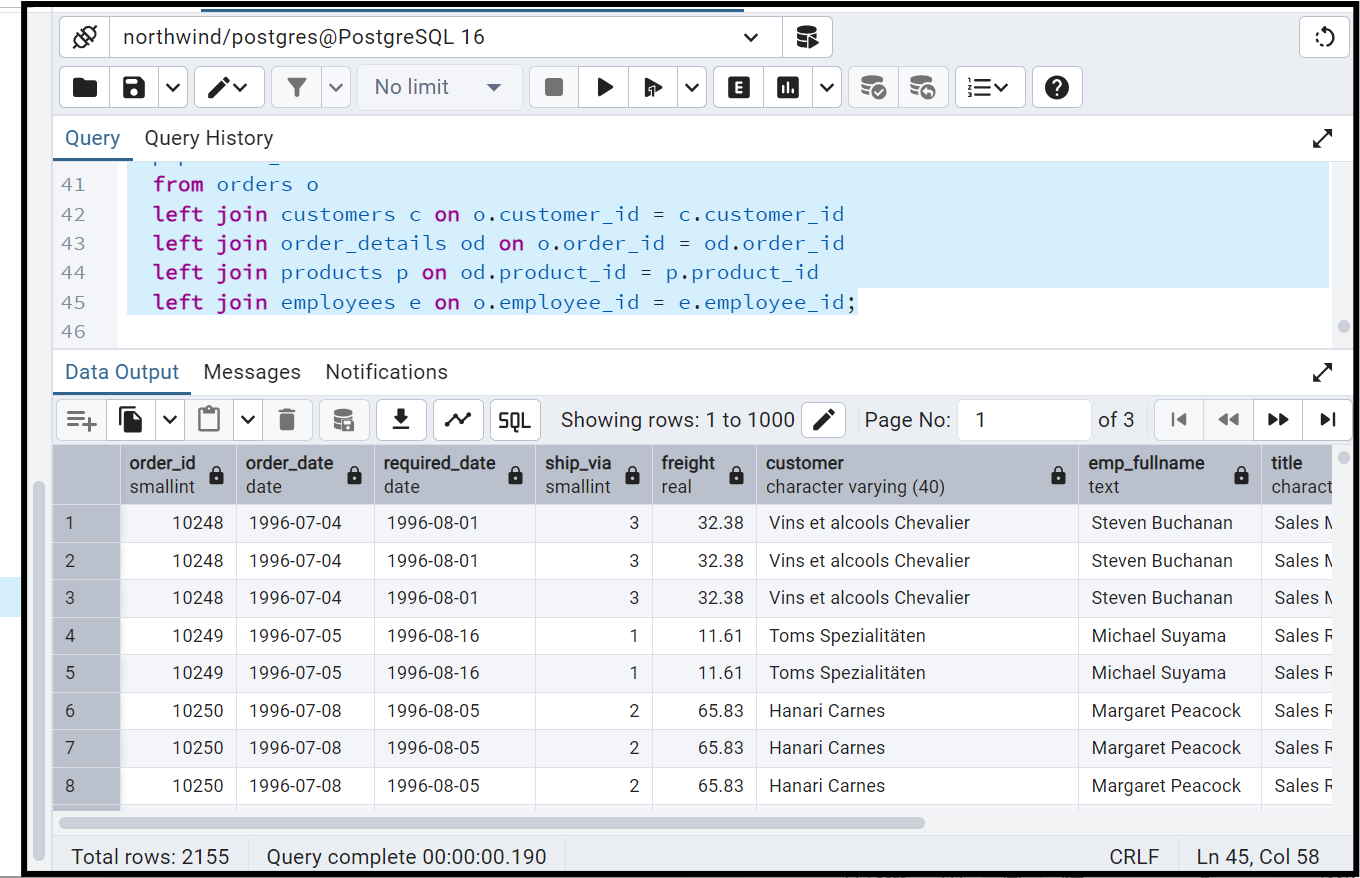
from orders o

left join customers c on o.customer\_id = c.customer\_id

left join order\_details od on o.order\_id = od.order\_id

left join products p on od.product\_id = p.product\_id

left join employees e on o.employee\_id = e.employee\_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

**Query:**

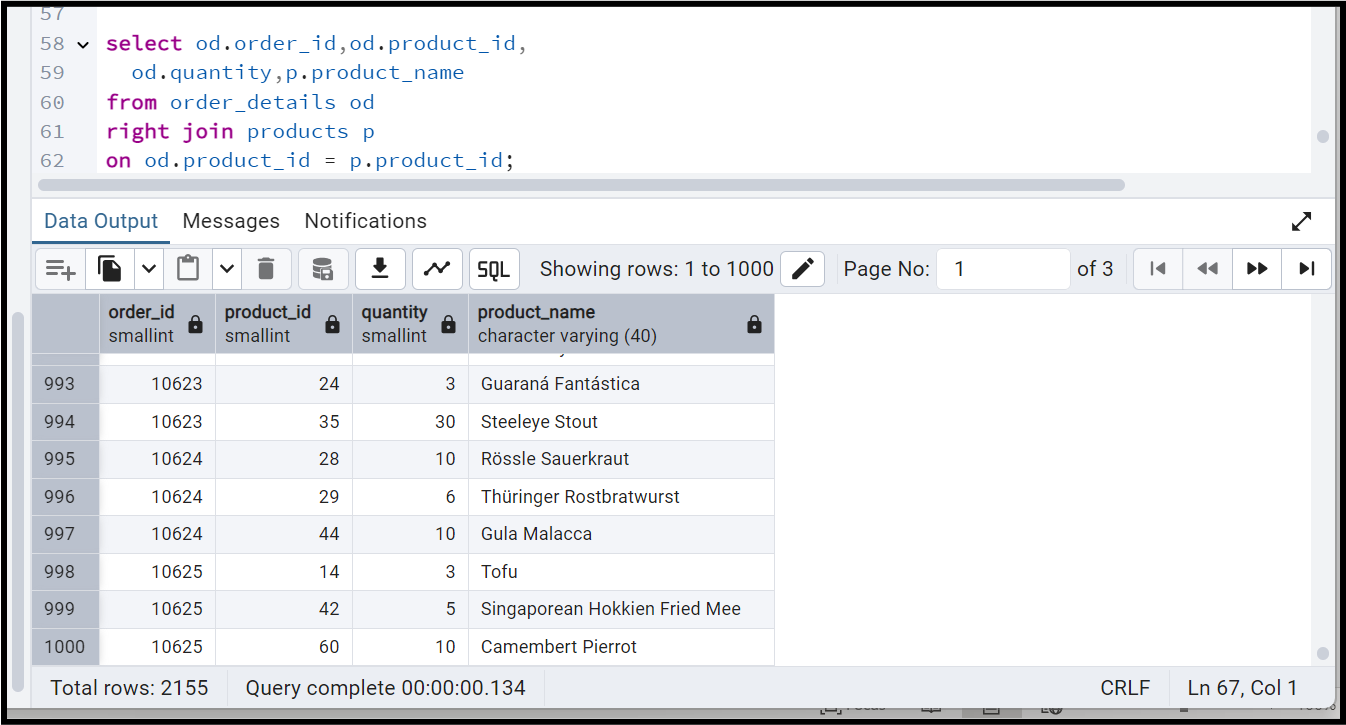
select od.order\_id,od.product\_id,

od.quantity, p.product\_name

from order\_details od

right join products p

on od.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)

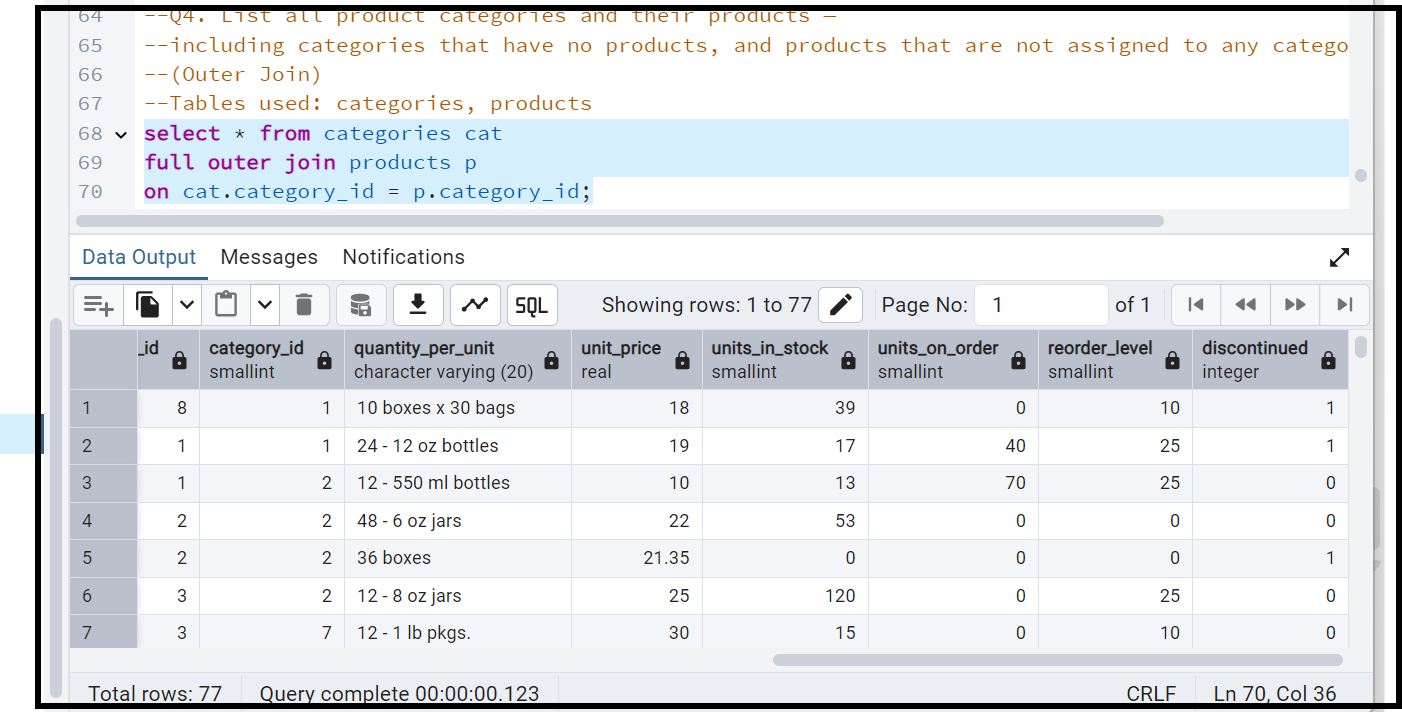
**Tables used: categories, products**

**Query:**

**select \* from categories cat**

**full outer join products p**

**on cat.category\_id = p.category\_id;**

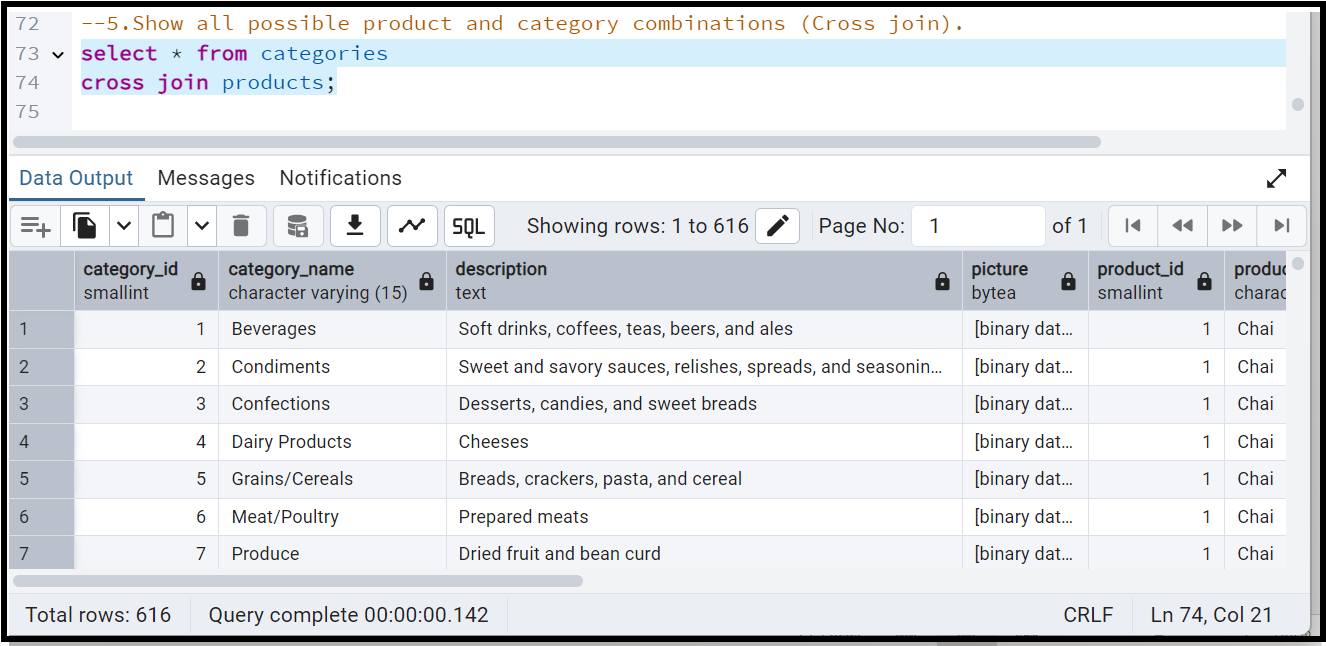
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5. Show all possible product and category combinations (Cross join).

**Query**:

select \* from categories

cross join products;



6. Show all employees and their manager(Self join(left join))

**Query:**

select e.first\_name || ' '||e.last\_name as employee\_name,

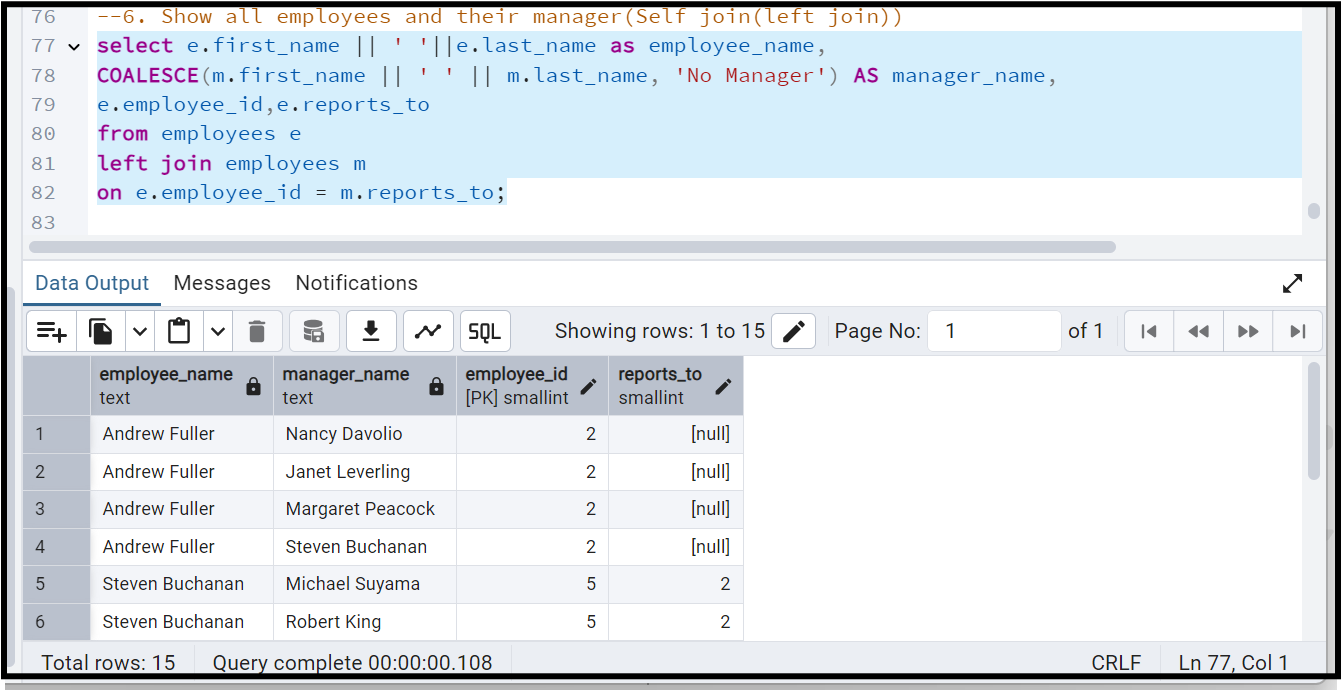
COALESCE(m.first\_name || ' ' || m.last\_name, 'No Manager') AS manager\_name,

e.employee\_id,e.reports\_to

from employees e

left join employees m

on e.employee\_id = m.reports\_to;



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

**Tables used:** customers, orders

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

**Query**:

select

c.\*,o.ship\_via

from customers c

left join orders o on c.customer\_id = o.customer\_id

WHERE o.ship\_via IS NULL;

