**DAY 4 SQL ASSIGNMENT [JOINS]**

**Greeshma Ravula DA 164**

**QUESTION 1)**

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

**QUERY DETAILS**

SELECT

c.company\_name AS customers,

o.order\_id,

p.product\_name,

od.quantity,

o.order\_date

FROM

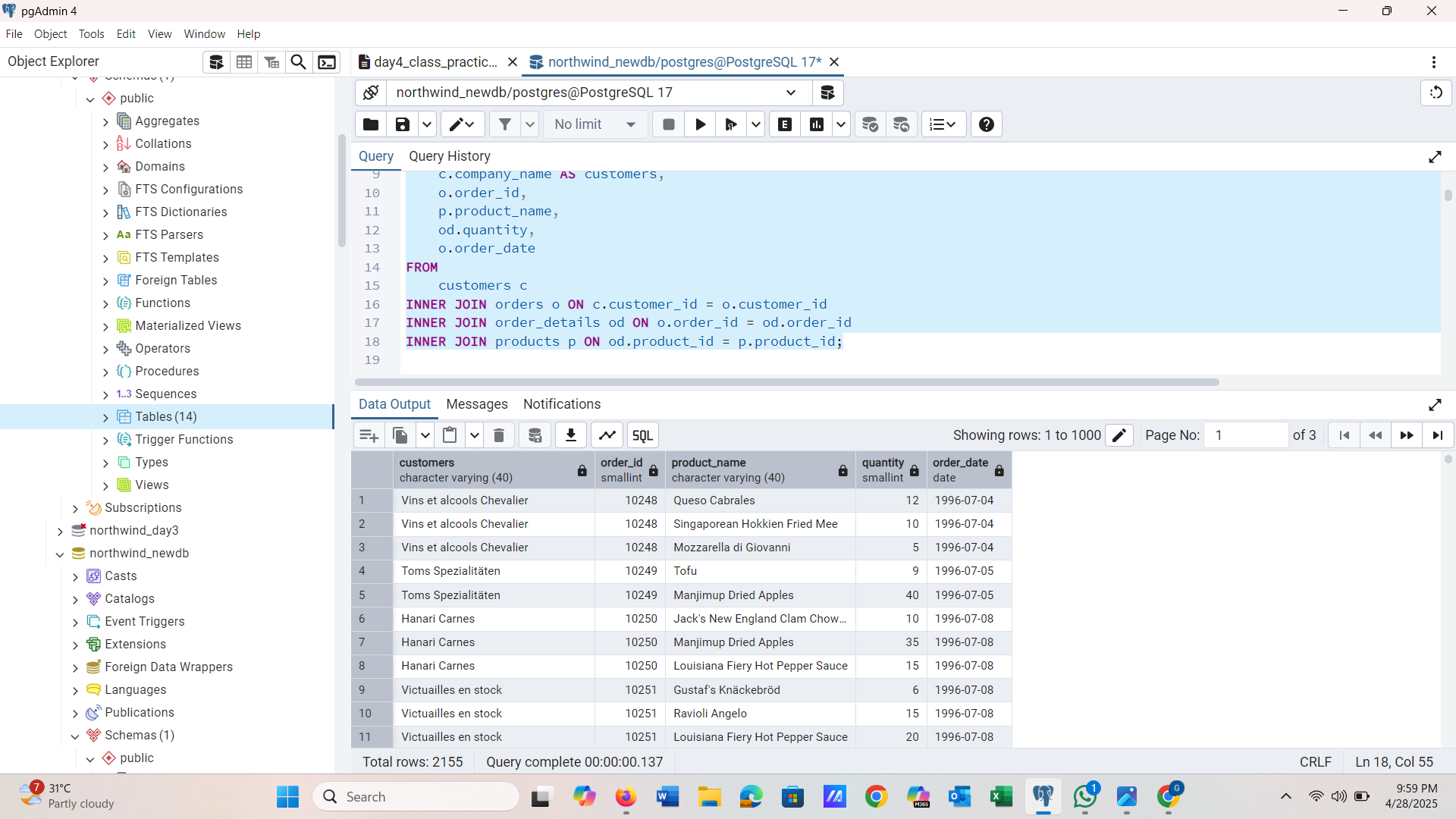
customers c

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;

**SCREENSHOTS**



**QUESTION 2)**

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

**QUERY DETAILS**

SELECT

o.order\_id,

c.company\_name AS customer,

e.first\_name || ' ' || e.last\_name AS employee,

s.company\_name AS shipper,

p.product\_name,

od.quantity

FROM orders o

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

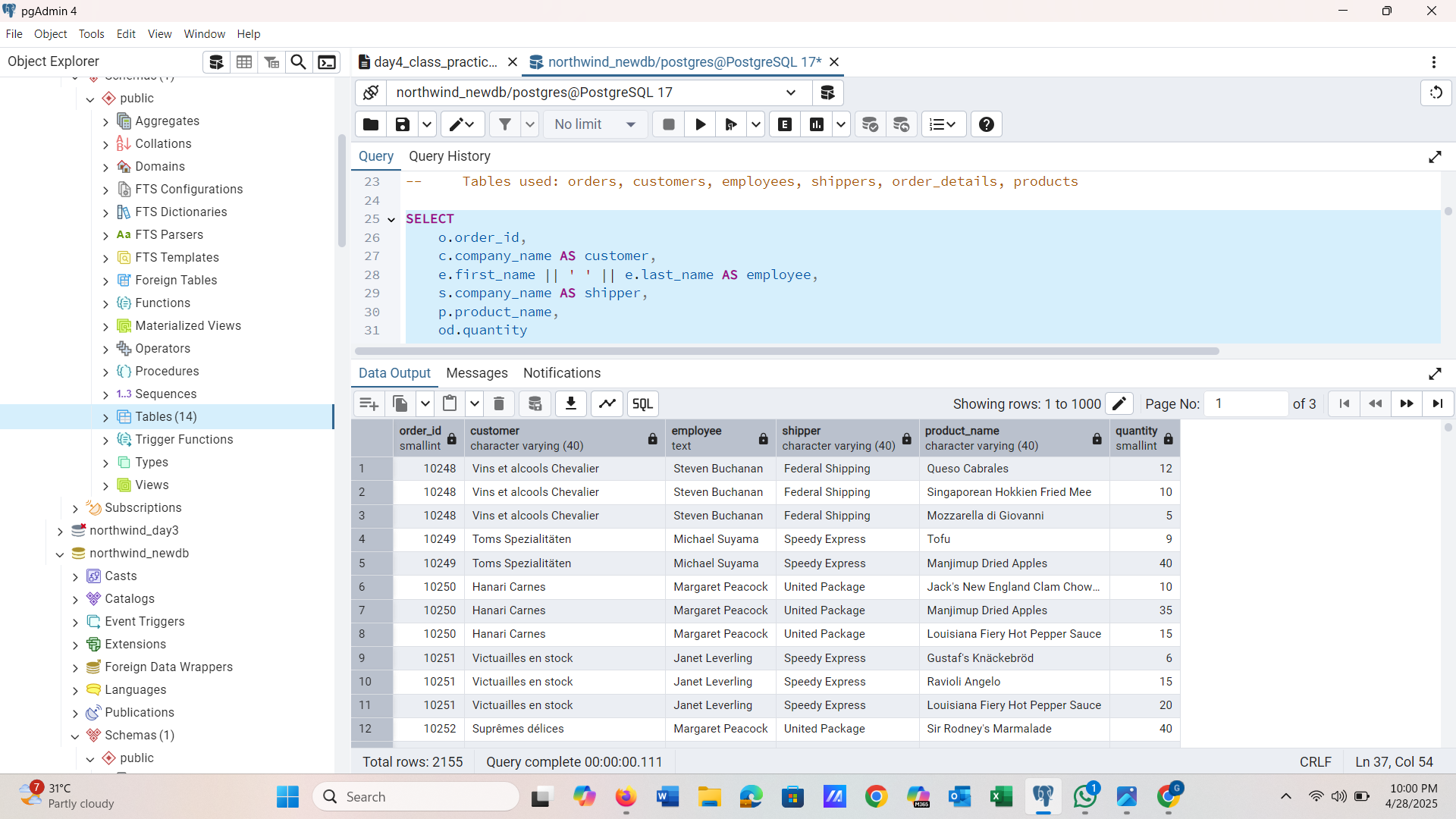
LEFT JOIN employees e ON o.employee\_id = e.employee\_id

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

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

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

**SCREENSHOTS**



**QUESTION 3)**

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

**QUERY DETAILS**

SELECT

od.order\_id,

p.product\_id,

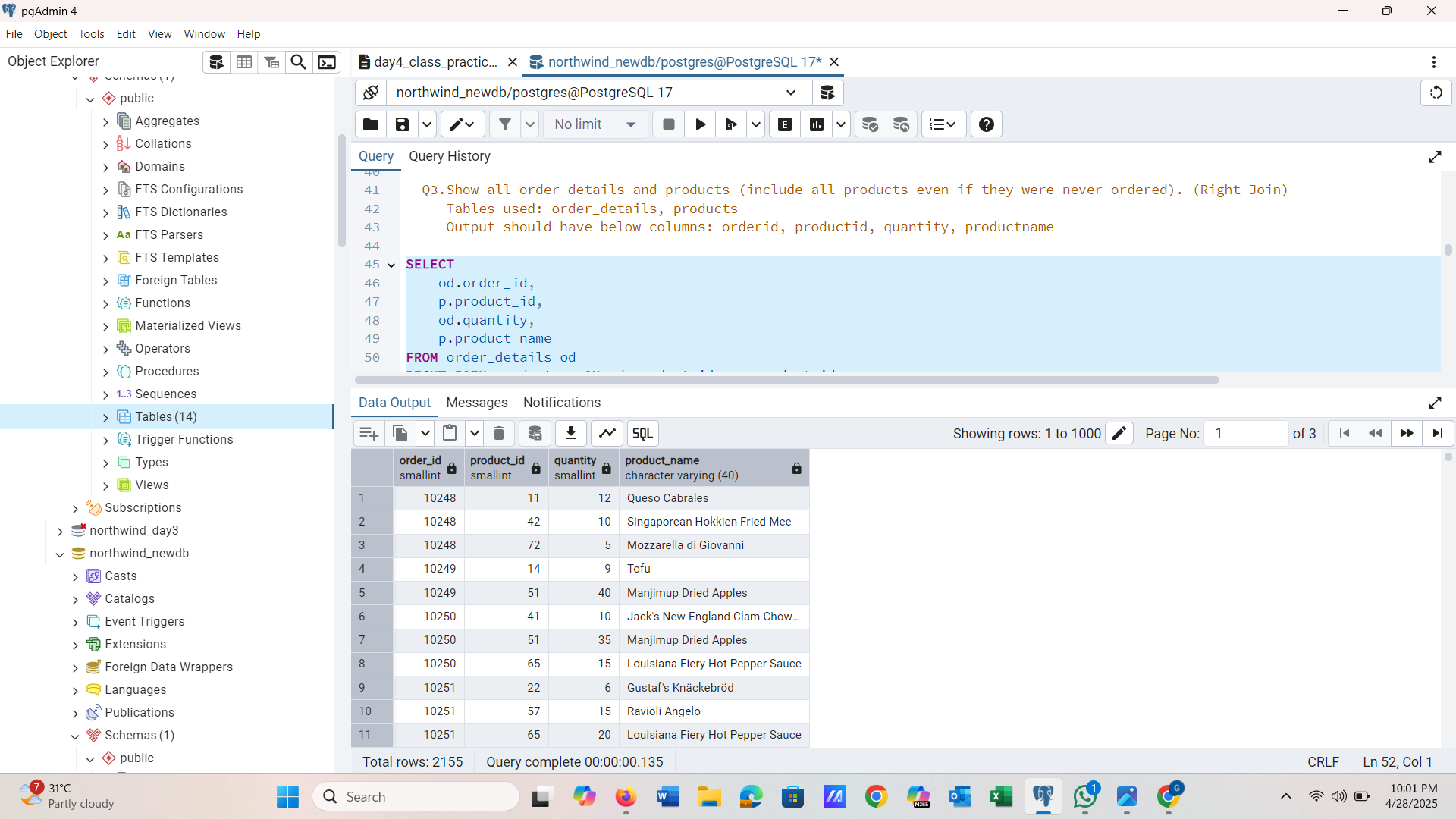
od.quantity,

p.product\_name

FROM order\_details od

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

**SCREENSHOTS**



**QUESTION 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)**

**QUERY DETAILS**

SELECT

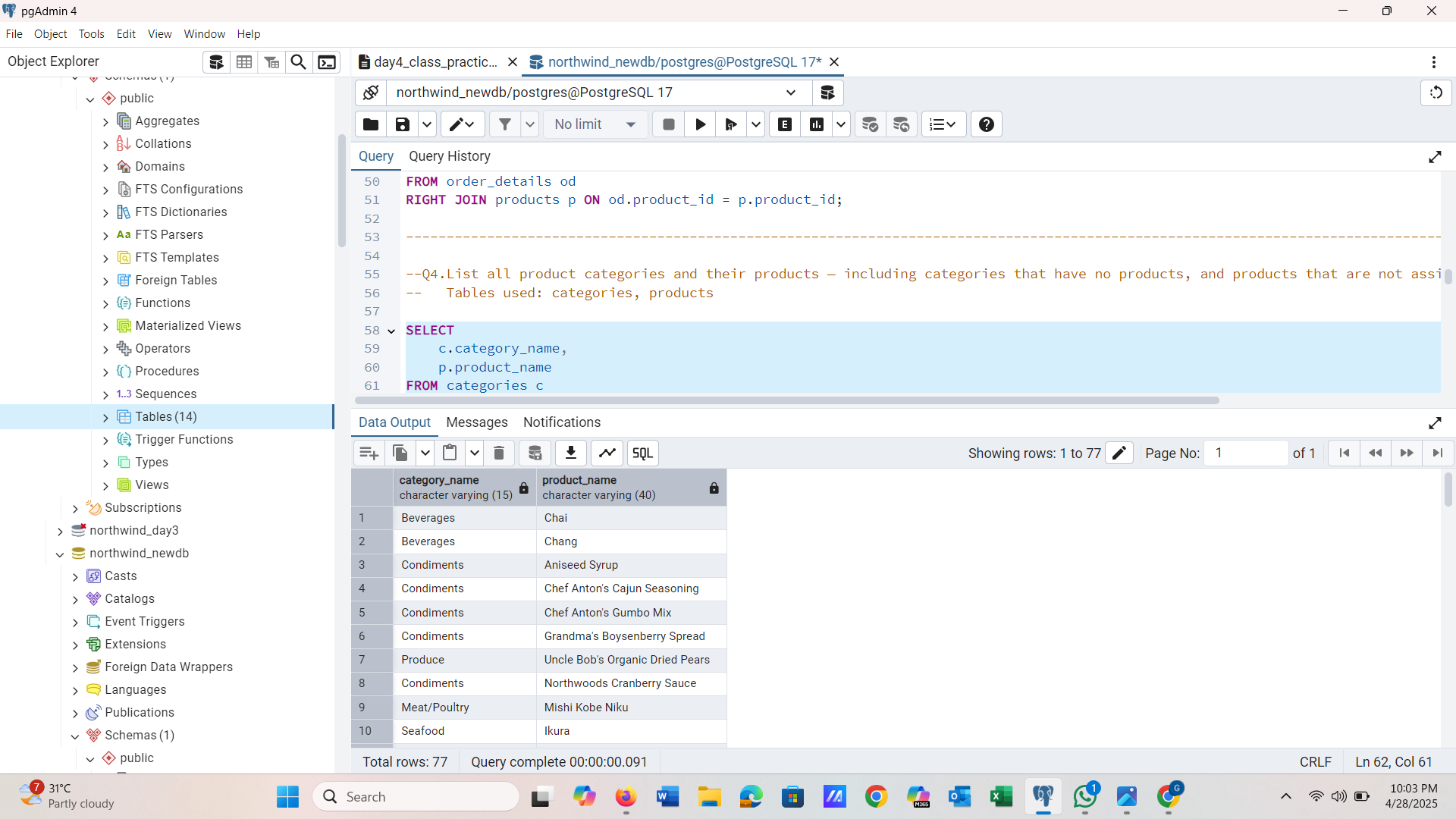
c.category\_name,

p.product\_name

FROM categories c

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

**SCREENSHOTS**



**QUESTION 5)**

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

**QUERY DETAILS**

SELECT

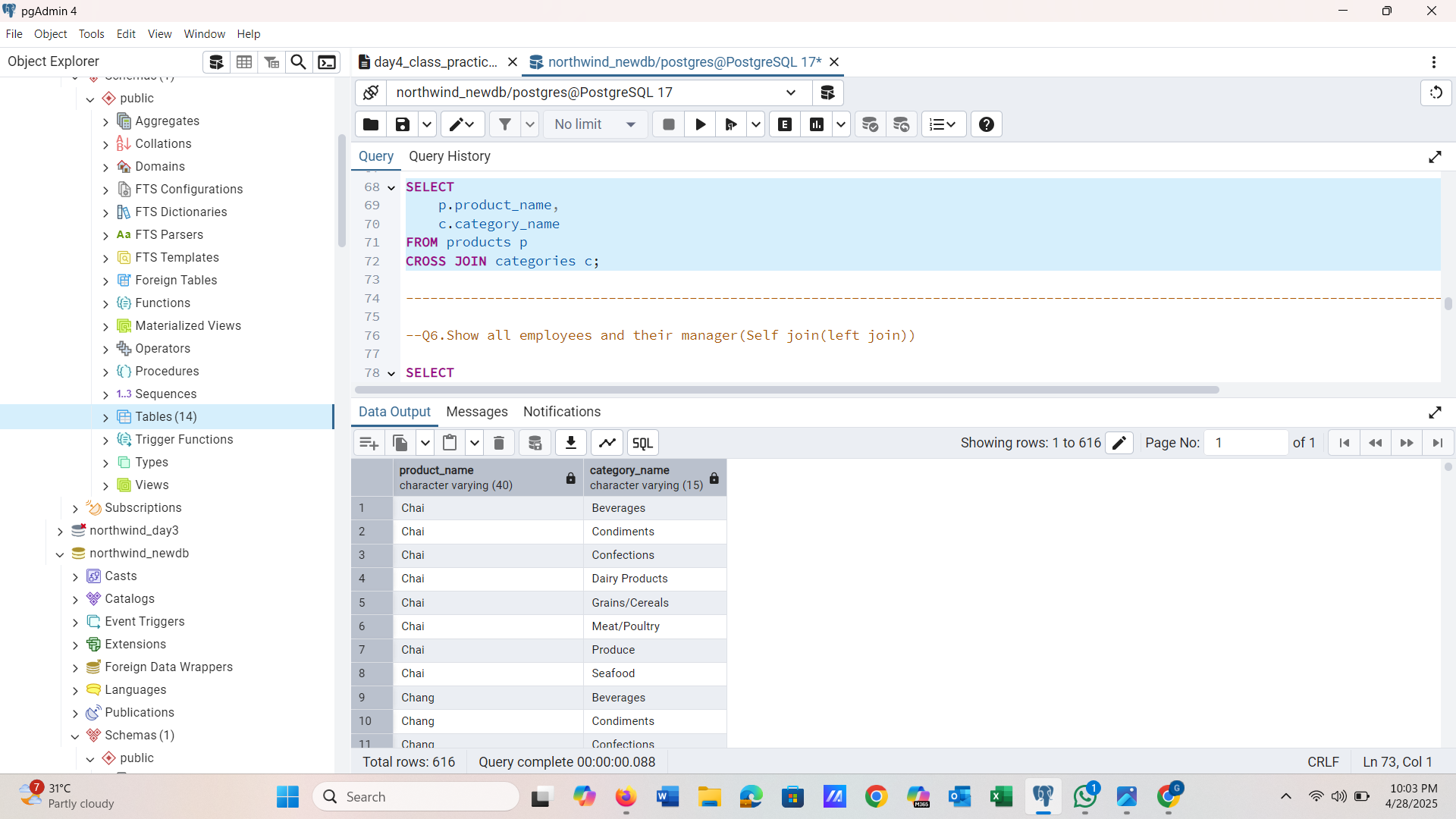
p.product\_name,

c.category\_name

FROM products p

CROSS JOIN categories c;

**SCREENSHOTS**



**QUESTION 6)**

**Show all employees and their manager(Self join(left join))**

**QUERY DETAILS**

SELECT

e1.first\_name || ' ' || e1.last\_name AS employee,

e2.first\_name || ' ' || e2.last\_name AS manager

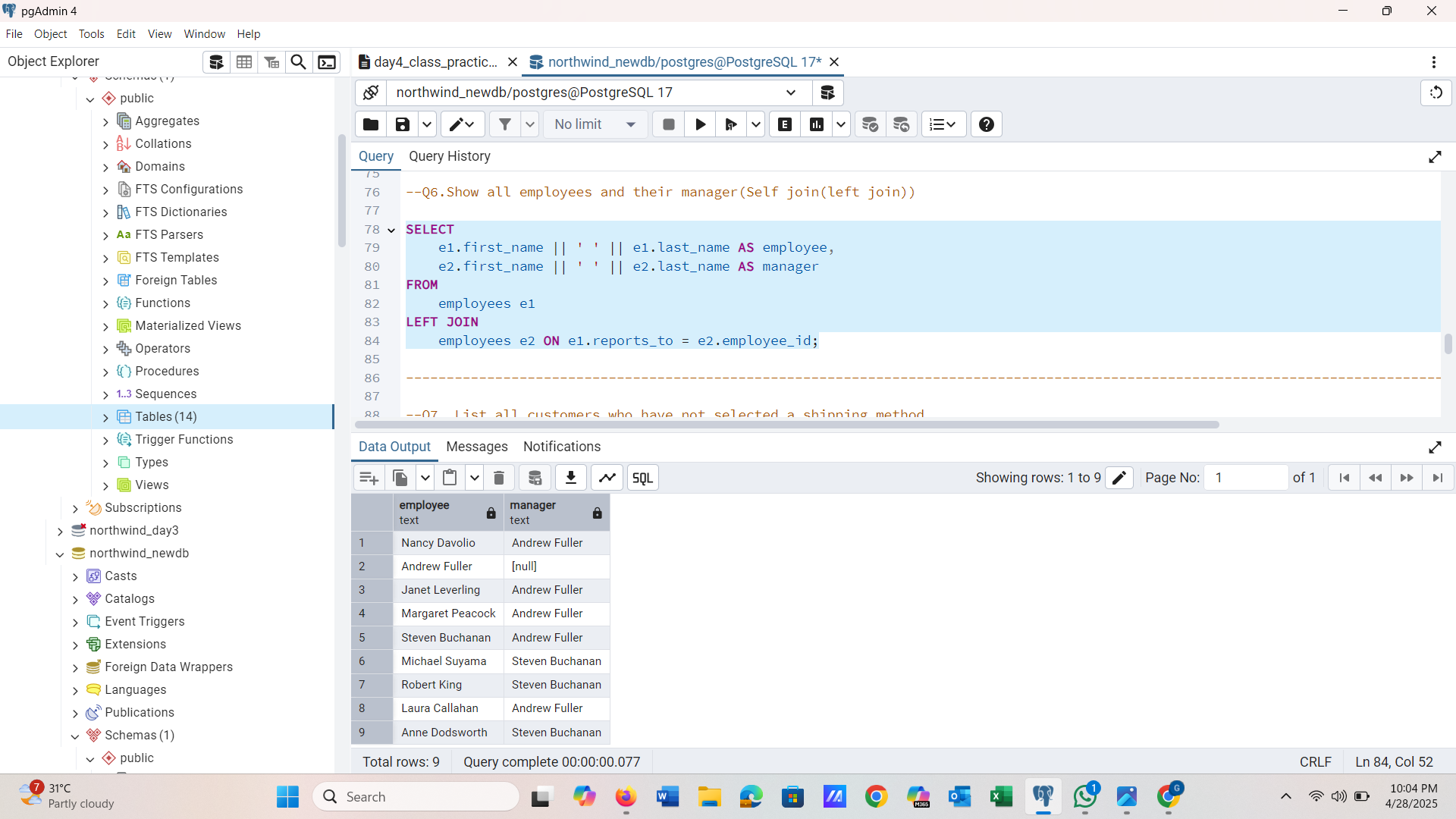
FROM

employees e1

LEFT JOIN

employees e2 ON e1.reports\_to = e2.employee\_id;

**SCREENSHOTS**

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**QUESTION 7)**

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

**QUERY DETAILS**

SELECT

c.contact\_name AS customers,o.ship\_via

FROM

customers c

LEFT JOIN

orders o ON c.customer\_id = o.customer\_id

WHERE o.ship\_via IS NULL;

**SCREENSHOTS**

