**DAY 4**

1.List all customers and the products they ordered with the order date.

**Query**  
 select c.company\_name as customer, 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

**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, c.company\_name as customer, e.first\_name||'\_'||e.last\_name as employees, s.shipper\_id, p.product\_name from orders o left join customers c on c.customer\_id =o.customer\_id left join employees e on e.employee\_id=o.employee\_id left join shippers s on s.shipper\_id=o.ship\_via left join order\_details od on o.order\_id= od.order\_id left join products p on od.product\_id=p.product\_id **Output:**

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

select od.order\_id,od.product\_id,od.quantity,p.product\_name from products p right join order\_details od on p.product\_id=od.product\_id

**OUTPUT:**



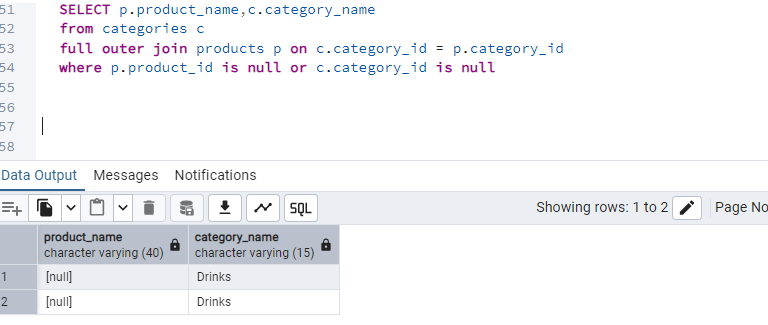
4. List all product categories and their products — including categories that have no products, and products that are not assigned to any category.(Outer Join)

**Tables used: categories, products**

SELECT p.product\_name,c.category\_name from categories c full outer join products p on c.category\_id = p.category\_id where p.product\_id is null or c.category\_id is null

**OUTPUT:**





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

select p.product\_name,p.product\_id, c.category\_name from products p cross join categories c

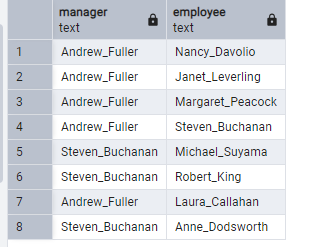
**Output**



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

select e1.first\_name || '*'|| e1.last\_name as manager, e2.first\_name ||'*'|| e2.last\_name as employee from employees e1 left join employees e2 on e1.employee\_id=e2.reports\_to where e1.employee\_id!=e2.employee\_id

**Output:**



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

**Tables used:** customers, orders **(Left Join, WHERE o.shipvia IS NULL)**

select c.customer\_id,c.company\_name,o.ship\_via from customers c left join orders o on c.customer\_id=o.customer\_id where o.ship\_via is null

**Output:**

