Day4\_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

C.COMPANY\_NAME AS CUSTOMER,

O.ORDER\_ID,

P.PRODUCT\_NAME,

OD.QUANTITY,

O.ORDER\_DATE

FROM

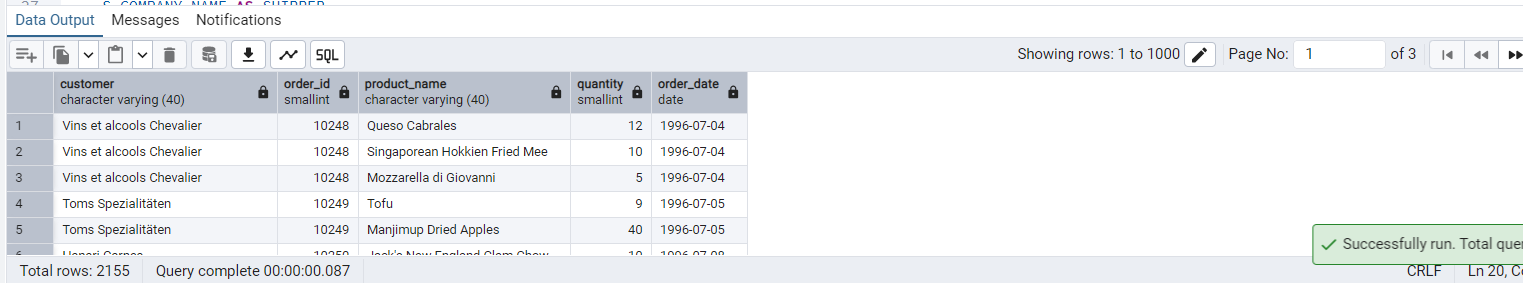
CUSTOMERS C

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

SELECT

O.ORDER\_ID,

C.CONTACT\_NAME AS CUSTOMER,

E.FIRST\_NAME || ' ' || E.LAST\_NAME AS EMPLOYEE,

S.COMPANY\_NAME AS SHIPPER,

P.PRODUCT\_NAME,

OD.QUANTITY,

O.ORDER\_DATE

FROM

ORDERS O

LEFT JOIN CUSTOMERS C ON O.CUSTOMER\_ID = C.CUSTOMER\_ID

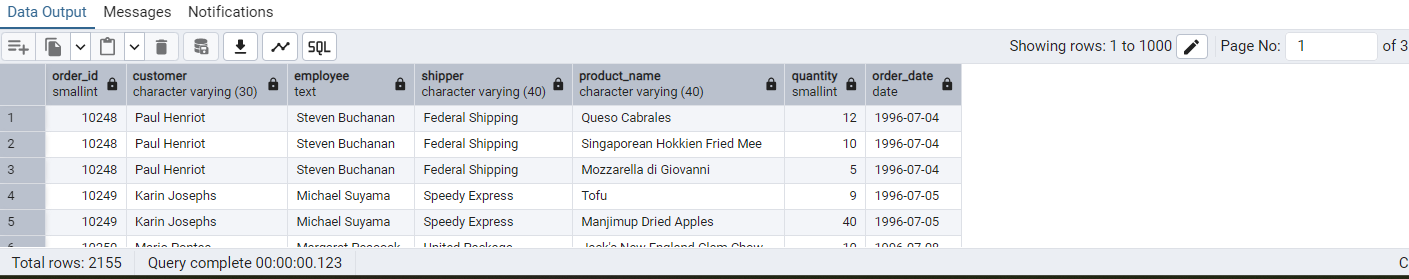
LEFT JOIN EMPLOYEES E ON O.EMPLOYEE\_ID = E.EMPLOYEE\_ID

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;

### OUTPUT



-- 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

OD.ORDER\_ID,

P.PRODUCT\_ID,

OD.QUANTITY,

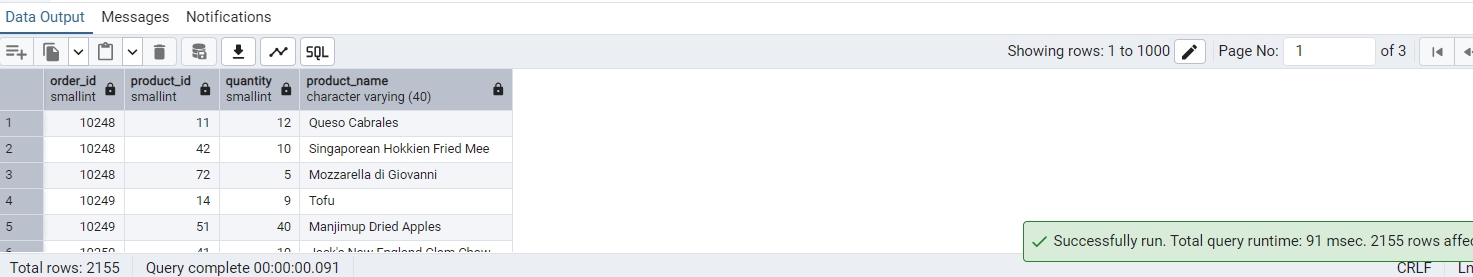
P.PRODUCT\_NAME

FROM

ORDER\_DETAILS OD

RIGHT JOIN PRODUCTS P ON OD.PRODUCT\_ID = P.PRODUCT\_ID;

### 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

C.CATEGORY\_ID,

C.CATEGORY\_NAME,

P.PRODUCT\_ID,

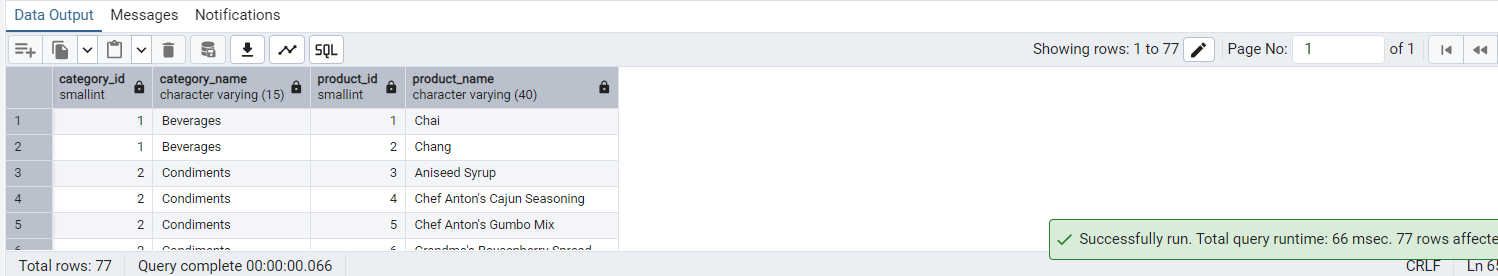
P.PRODUCT\_NAME

FROM

CATEGORIES C

FULL OUTER JOIN PRODUCTS P ON C.CATEGORY\_ID = P.CATEGORY\_ID;

### OUTPUT



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

SELECT

P.PRODUCT\_ID,

P.PRODUCT\_NAME,

P.SUPPLIER\_ID,

P.CATEGORY\_ID,

P.QUANTITY\_PER\_UNIT,

P.UNIT\_PRICE,

P.UNITS\_IN\_STOCK,

P.UNITS\_ON\_ORDER,

P.REORDER\_LEVEL,

P.DISCONTINUED,

C.CATEGORY\_ID,

C.CATEGORY\_NAME,

C.DESCRIPTION,

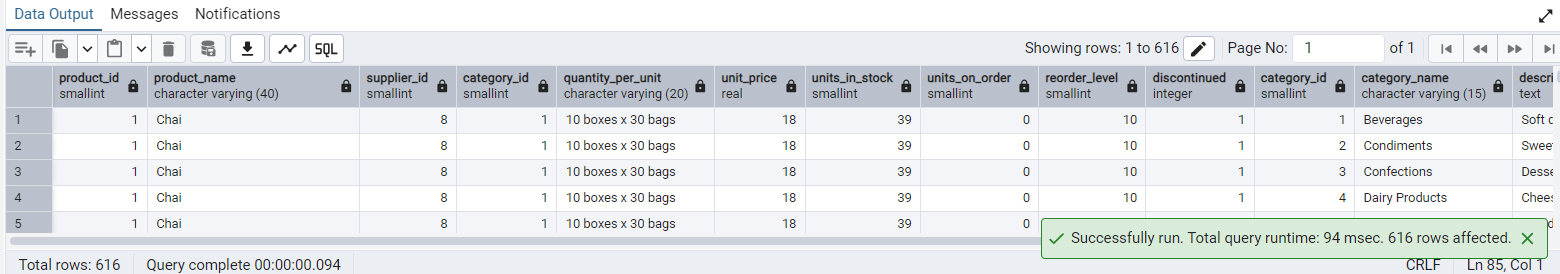
C.PICTURE

FROM

PRODUCTS P

CROSS JOIN CATEGORIES C;

### OUTPUT



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

SELECT

E1.EMPLOYEE\_ID AS EMPLOYEEID,

E1.FIRST\_NAME || ' ' || E1.LAST\_NAME AS EMPLOYEE\_NAME,

E2.EMPLOYEE\_ID AS MANAGER\_ID,

E2.FIRST\_NAME || ' ' || E2.LAST\_NAME AS MANAGER\_NAME

FROM

EMPLOYEES E1

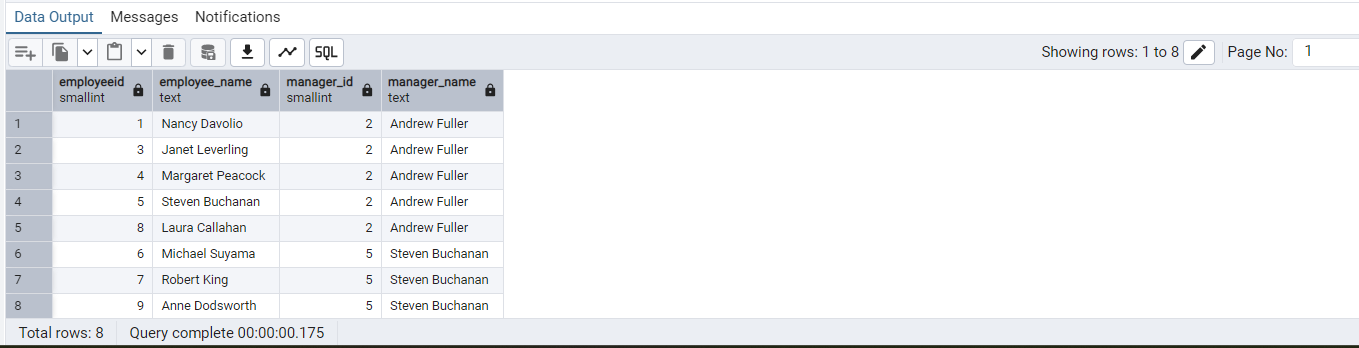
JOIN EMPLOYEES E2 ON E1.REPORTS\_TO = E2.EMPLOYEE\_ID

ORDER BY

E2.EMPLOYEE\_ID,

E1.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

FROM

CUSTOMERS C

LEFT JOIN ORDERS O ON C.CUSTOMER\_ID = O.CUSTOMER\_ID

WHERE

O.SHIP\_VIA IS NULL;

### OUTPUT

