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

SELECT C.COMPANY\_NAME AS CUSTOMER,

O.ORDER\_ID,

P.PRODUCT\_NAME,

OD.QUANTITY,

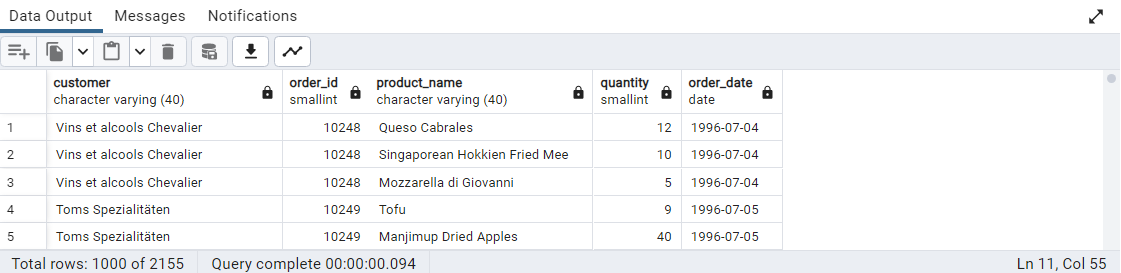
O.ORDER\_DATE

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



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

SELECT O.ORDER\_ID,

C.CUSTOMER\_ID,

E.EMPLOYEE\_ID,

S.SHIPPER\_ID,

P.PRODUCT\_NAME

FROM ORDERS O

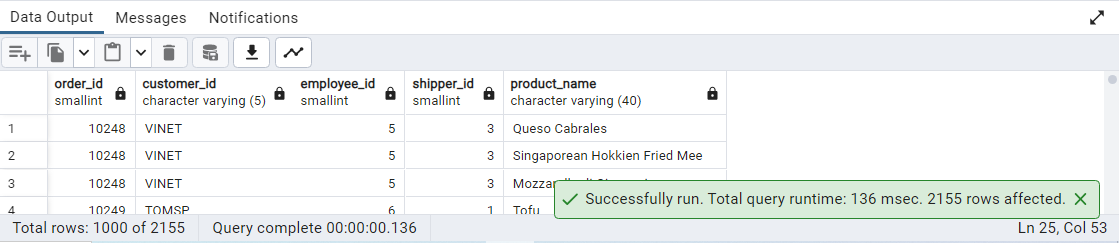
LEFT JOIN CUSTOMERS C ON O.CUSTOMER\_ID = C.CUSTOMER\_ID

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



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

SELECT OD.ORDER\_ID,

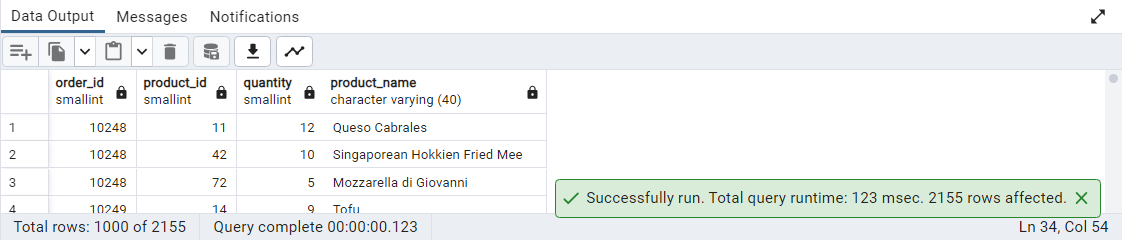
P.PRODUCT\_ID,

OD.QUANTITY,

P.PRODUCT\_NAME

FROM ORDER\_DETAILS OD

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



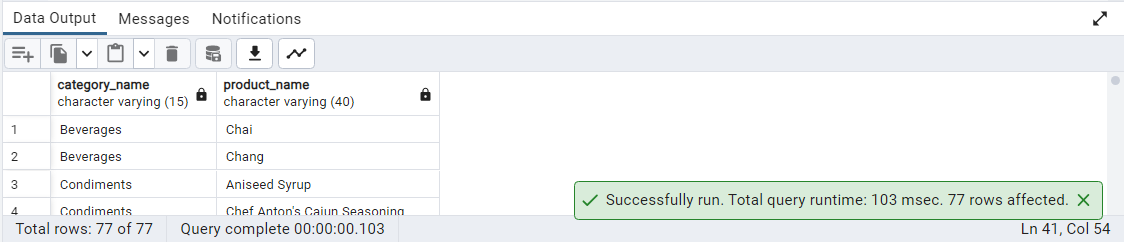
--4.List all product categories and their products — including categories that have no products, and products that are not assigned to any category

SELECT C.CATEGORY\_NAME,

P.PRODUCT\_NAME

FROM CATEGORIES C

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



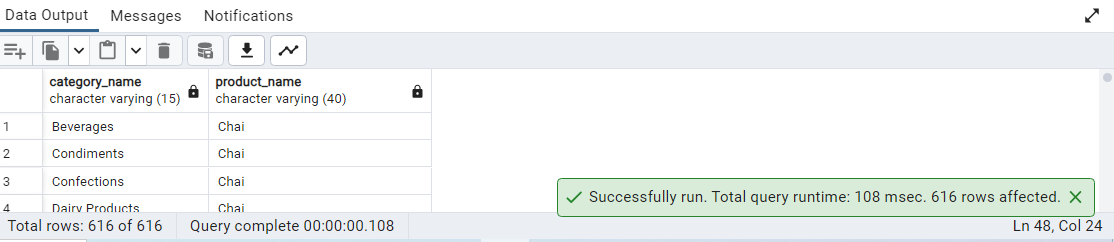
--5.Show all possible product and category combinations

SELECT C.CATEGORY\_NAME,

P.PRODUCT\_NAME

FROM PRODUCTS P

CROSS JOIN CATEGORIES C



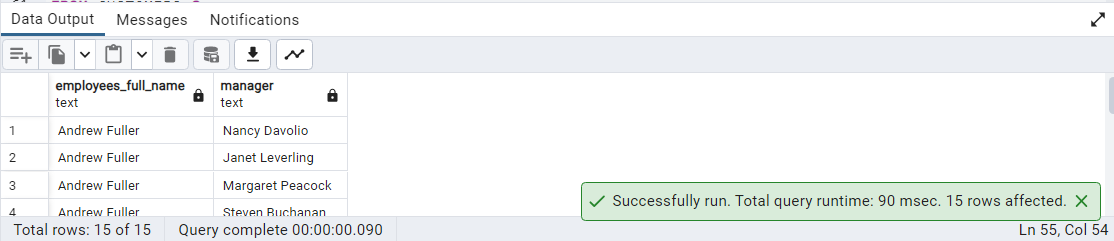
--6.Show all employees and their manager(Self join(left join))

SELECT E.FIRST\_NAME || ' ' || E.LAST\_NAME AS EMPLOYEES\_FULL\_NAME,

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

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.

SELECT C.CUSTOMER\_ID,

O.SHIP\_VIA

FROM CUSTOMERS C

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

WHERE O.SHIP\_VIA IS NULL

