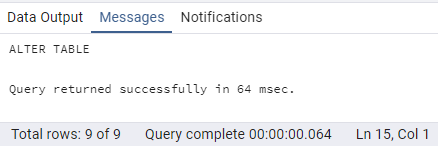
**Day2 Assignment:**

1)      Alter Table:

* Add a new column linkedin\_profile to employees table to store LinkedIn URLs as varchar.

***Script:*** *ALTER TABLE employees add column linkedin\_profile varchar(100);*

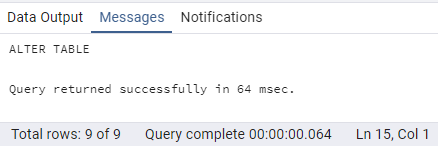
***Screenshot:***

**

* Change the linkedin\_profile column data type from VARCHAR to TEXT.

***Script:*** *ALTER TABLE employees alter column linkedin\_profile type text;*

***Screenshot:***

**

* Need to update the null values with unique values to make the column as Not Null and Unique.

***Script:*** *UPDATE employees set linkedin\_profile = 'https://linkedin.com/placeholder-' || "employeeID" where linkedin\_profile is NULL;*

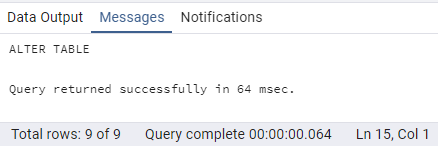
***Screenshot:***

**

* Adding Not Null Constraint

***Script:*** *ALTER TABLE employees alter column linkedin\_profile set NOT NULL;*

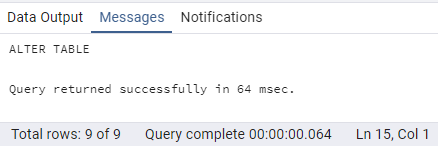
***Screenshot:***

**

* Adding Unique Constraint

***Script:*** *ALTER TABLE employees ADD CONSTRAINT unique\_linked UNIQUE (linkedin\_profile);*

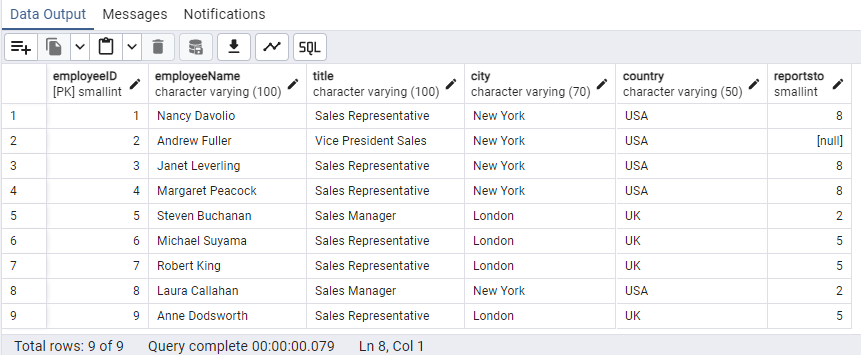
***Screenshot:***

**

* Dropping the column

***Script:*** *ALTER TABLE employees drop column linkedin\_profile;*

***Screenshot:***

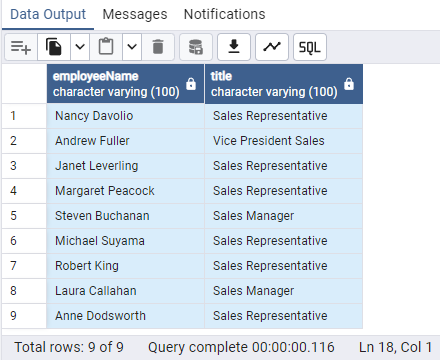
**

2)      Querying (Select)

* Retrieve the employee name and title of all employees

***Script:*** *SELECT "employeeName",title from employees;*

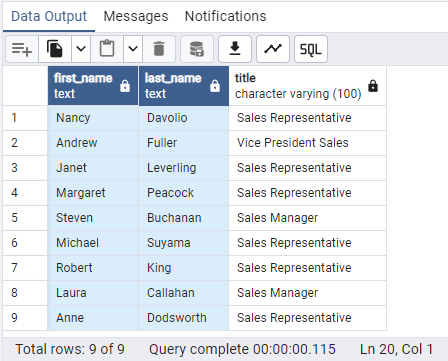
***Screenshot:***

**

* Retrieve the first name, last name, and title of all employees

***Script:*** *SELECT SPLIT\_PART("employeeName",' ',1) as first\_name,SPLIT\_PART("employeeName",' ',2) as last\_name, title from employees;*

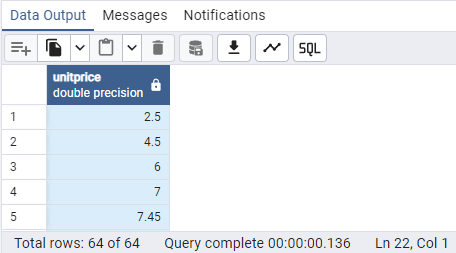
***Screenshot:***

**

* Find all unique unit prices of products

***Script:*** *SELECT DISTINCT unitprice FROM products ORDER BY unitprice;*

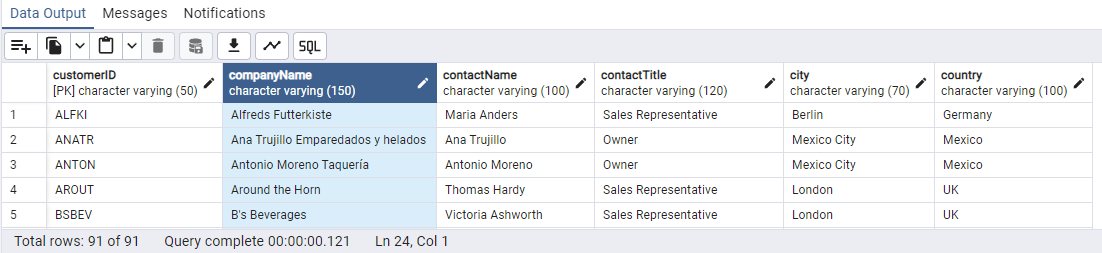
***Screenshot:***

**

* List all customers sorted by company name in ascending order

***Script:*** *SELECT \* FROM customers ORDER BY "companyName"*

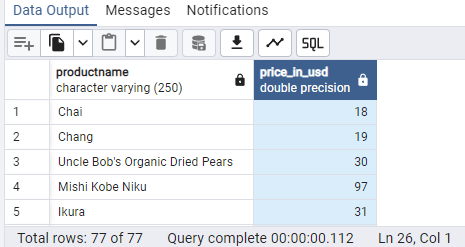
***Screenshot:***

**

* Display product name and unit price, but rename the unit\_price column as price\_in\_usd

***Script:*** *select productname,unitprice as price\_in\_usd from products;*

***Screenshot:***

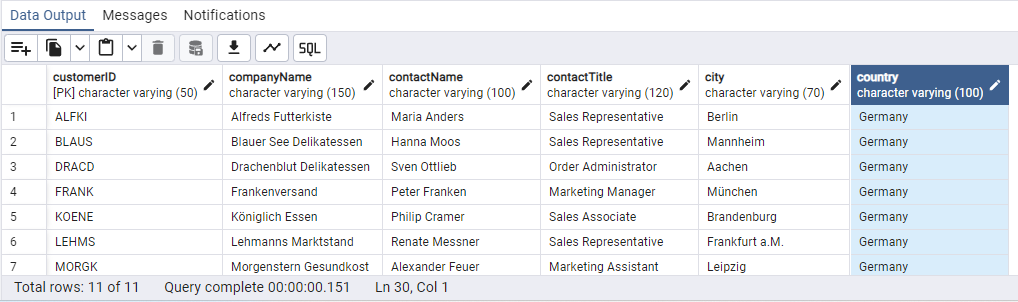
******

3)      Filtering

* Get all customers from Germany.

***Script:*** *select \* from customers where country = 'Germany';*

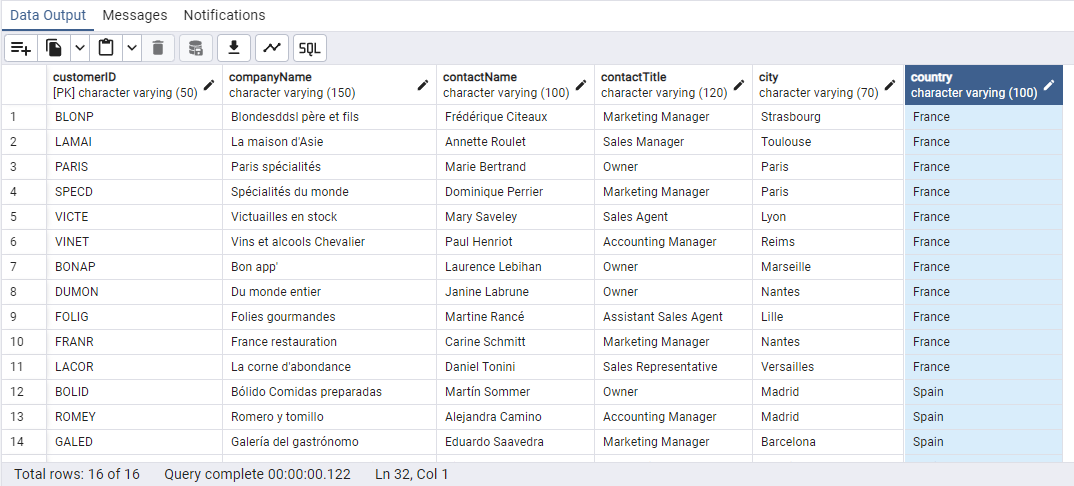
***Screenshot:***

**

* Find all customers from France or Spain

***Script:*** *select \* from customers where country in ('France','Spain') ORDER BY country;*

***Screenshot:***

**

* Retrieve all orders placed in 2014(based on order\_date), and either have freight greater than 50 or the shipped date available (i.e., non-NULL)  (Hint: EXTRACT(YEAR FROM order\_date))

***Script:*** *SELECT \*,*

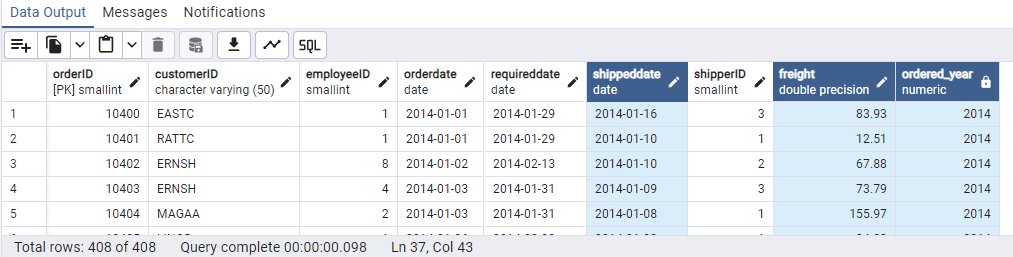
*EXTRACT(YEAR FROM orderdate) AS ordered\_year*

*FROM orders*

*WHERE (freight > 50 OR shippeddate IS NOT NULL)*

*AND EXTRACT(YEAR FROM orderdate) = 2014;*

***Screenshot:***

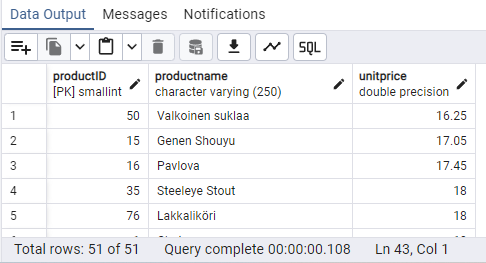
**

4)      Filtering

* Retrieve the product\_id, product\_name, and unit\_price of products where the unit\_price is greater than 15.

***Script:*** *select "productID",productname,unitprice from products where unitprice > 15 order by unitprice;*

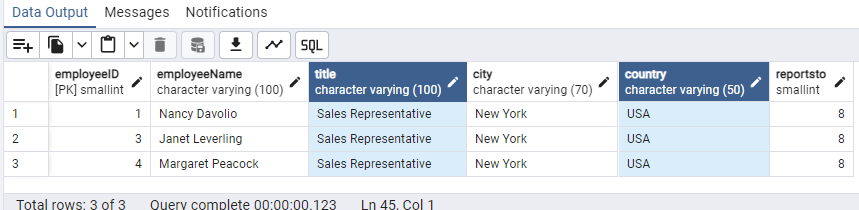
***Screenshot:***

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* List all employees who are located in the USA and have the title "Sales Representative".

***Script:*** *select \* from employees where country = 'USA' and title = 'Sales Representative';*

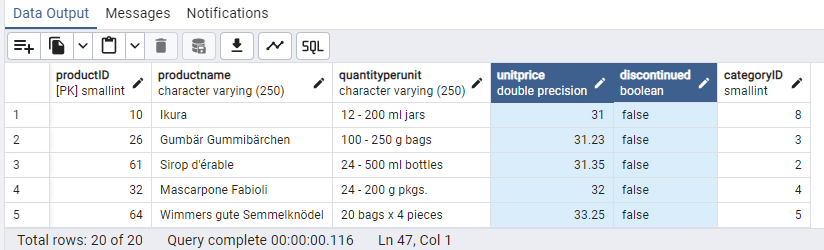
***Screenshot:***

**

* Retrieve all products that are not discontinued and priced greater than 30

***Script:*** *select \* from products where discontinued = 'false' and unitprice > 30 order by unitprice;*

***Screenshot:***

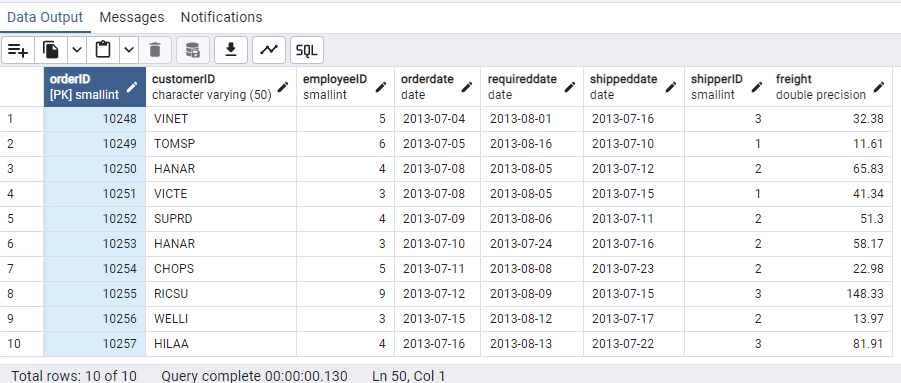
**

5)      LIMIT/FETCH

* Retrieve the first 10 orders from the orders table.

***Script:*** *select \* from orders LIMIT 10;*

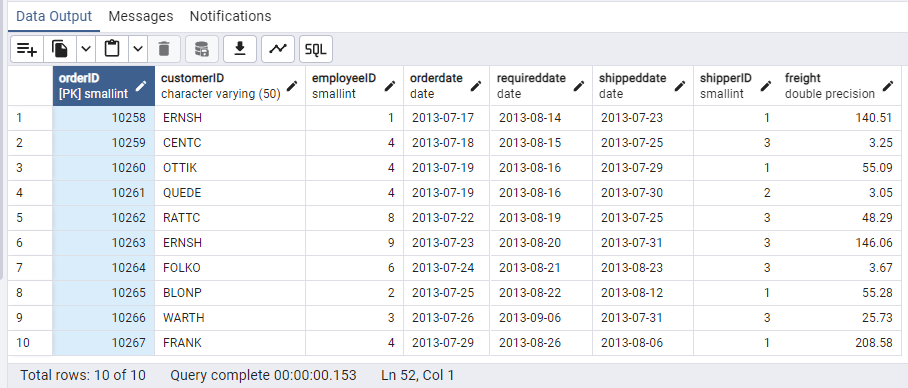
***Screenshot:***

**

* Retrieve orders starting from the 11th order, fetching 10 rows (i.e., fetch rows 11-20).

***Script:*** *select \* from orders LIMIT 10 OFFSET 10;*

***Screenshot:***

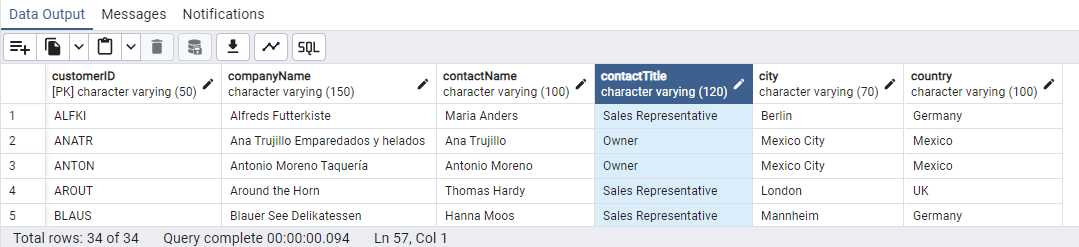
**

6)      Filtering (IN, BETWEEN)

* List all customers who are either Sales Representative, Owner

***Script:*** *select \* from customers where "contactTitle" in ('Sales Representative','Owner');*

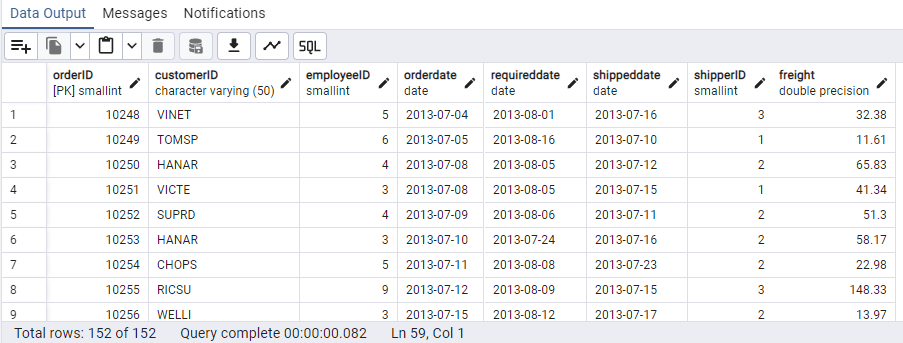
***Screenshot:***

**

* Retrieve orders placed between January 1, 2013, and December 31, 2013.

***Script:*** *select \* from orders where orderdate between '2013-01-01' and '2013-12-31' order by orderdate;*

***Screenshot:***

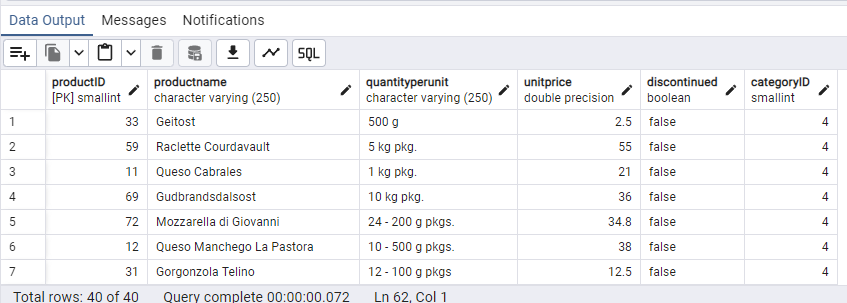


7)      Filtering

* List all products whose category\_id is not 1, 2, or 3.

***Script:*** *select \* from products where "categoryID" not in (1,2,3) order by "categoryID";*

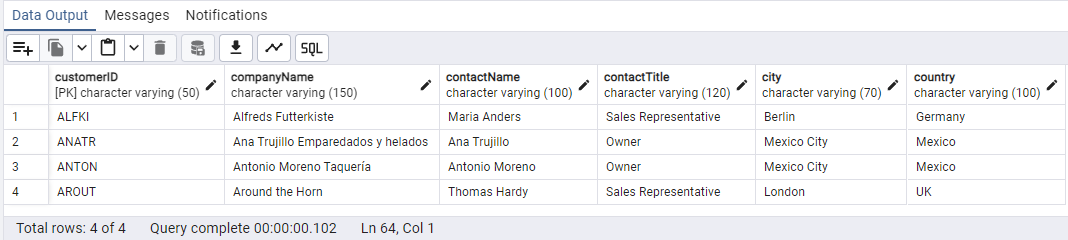
***Screenshot:***

******

* Find customers whose company name starts with "A".

***Script:*** *select \* from customers where "companyName" like 'A%';*

**Screenshot:**

****

8)       INSERT into orders table:

 Task: Add a new order to the orders table with the following details:

Order ID: 11078

Customer ID: ALFKI

Employee ID: 5

Order Date: 2025-04-23

Required Date: 2025-04-30

Shipped Date: 2025-04-25

shipperID:2

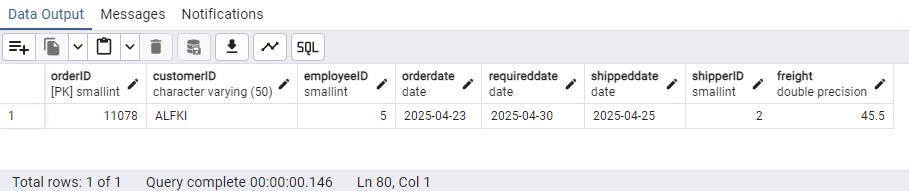
Freight: 45.50

**Script**:

*insert into orders("orderID","customerID","employeeID",orderdate,requireddate,shippeddate,"shipperID",freight)*

*values (11078,'ALFKI',5,'2025-04-23','2025-04-30','2025-04-25',2,45.50);*

***Screenshot:***

******

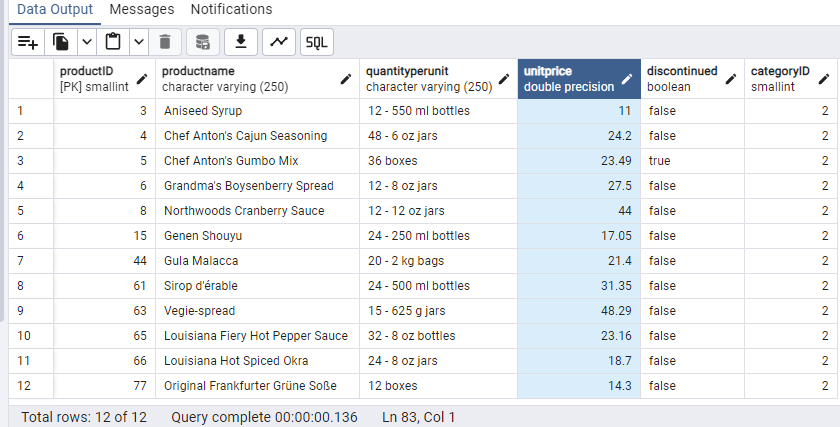
9)      Increase(Update)  the unit price of all products in category\_id =2 by 10%.

(HINT: unit\_price =unit\_price \* 1.10)

***Script:***

*Update products set unitprice = unitprice \* 1.10 where "categoryID" = 2;*

***Screenshot:***

******

10) Sample Northwind database:

Download

1. Download northwind.sql from below link into your local. Sign in to Git first <https://github.com/pthom/northwind_psql>
2. Manually Create the database using pgAdmin:
   1. Right-click on "Databases" → Create → Database
   2. Give name as ‘northwind’ (all small letters)
   3. Click ‘Save’

Import database:

1. Open pgAdmin and connect to your server
2. Select the database  ‘northwind’
3. Right Click-> Query tool.
4. Click the folder icon to open your northwind.sql file
5. Press F5 or click the Execute button.
6. You will see total 14 tables loaded
7. Databases → your database → Schemas → public → Tables

**Script:** Ran the scripts from the northwind.sql file and below is the screenshot of the db with the 14 tables.

**Screenshot:**

