1) Alter Table:

Add a new column linkedin profile to employees table to store LinkedIn URLs as

```
Alter table employees
       add column linkedin_profile varchar(60);
  4 Alter table employees
      Alter column linkedin profile type TEXT;
  6 Alter table employees
       Alter column linkedin_profile set not null,
              atraint unique libeledie profile unique/libeledi
  Data Output Messages Notifications
  ALTER TABLE
  Query returned successfully in 144 msec.
Change the linkedin_profile column data type from VARCHAR to TEXT.
    4 Alter table employees
```

```
Alter column linkedin_profile type TEXT;
6 ∨ Alter table employees
     Alter column linkedin profile set not null,
             traint unique linkadin profile uniqu
                      Notifications
Data Output
           Messages
ALTER TABLE
Query returned successfully in 115 msec.
```

Add unique, not null constraint to linkedin profile

```
8 Alter table employees
    Alter column linkedin_profile set not null,
    ADD CONSTRAINT unique_linkedin_profile unique(linkedin_profile);
```

Drop column linkedin profile

95 **ALTER TABLE** employees 96 **DROP COLUMN** linkedin_profile; 97

Data Output Messages Notifications

ALTER TABLE

Query returned successfully in 119 msec.

- 2) Querying (Select)
 - Retrieve the first name, last name, and title of all employees

```
39 -- Querying (Select)
40 Select employeename, title
      from employees;
41
42
43 ∨ select * from products
      select distinct unitprice
      from products.
                          Notifications
Data Output
              Messages
                                            SQL
=+
       employeename
                             title
      character varying (60)
                             character varying (100)
       Nancy Davolio
                              Sales Representative
       Andrew Fuller
                              Vice President Sales
2
3
       Janet Leverling
                              Sales Representative
       Margaret Peacock
                              Sales Representative
4
5
       Steven Buchanan
                              Sales Manager
6
       Michael Suyama
                              Sales Representative
7
       Robert King
                              Sales Representative
       Laura Callahan
8
                              Sales Manager
       Anne Dodsworth
                              Sales Representative
                 Query complete 00:00:00.138
Total rows: 9
```

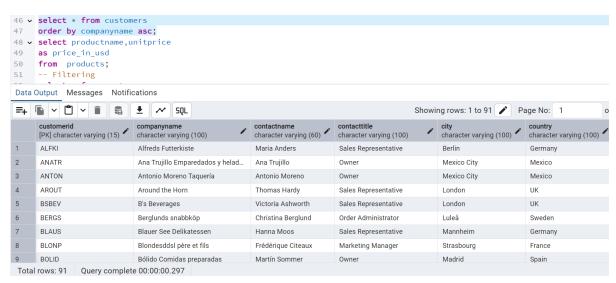
Find all unique unit prices of products

46 v 47 48 v	<pre>select distinct unitprice from products; select * from customers order by companyname asc; select productname, unitprice Output Messages Notifications</pre>
=+	□ ∨ □ ∨ □ □ □ □ □ □ □ □ □ □
	unitprice numeric (10,2)
1	62.50
2	55.00
3	19.00
4	45.60
5	14.00
6	17.00
7	7.00
8	9.20
9	34.00
Total rows: 62 Query complete 00:00:00.137	

• List all customers sorted by company name in ascending order

•

•

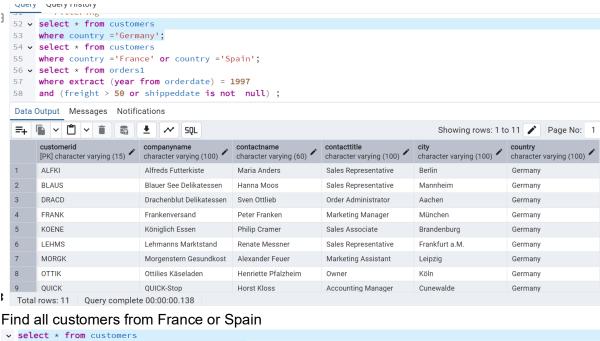


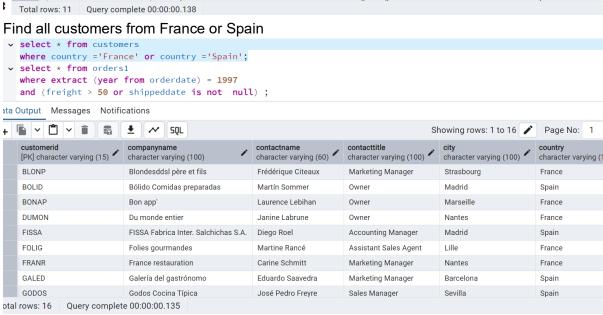
• Display product name and unit price, but rename the unit_price column as price_in_usd

```
48 v select productname, unitprice
      as price_in_usd
49
      from products;
50
      -- Filtering
51
52 v select * from customers
      where country ='Germany';
53
Data Output
              Messages
                         Notifications
                                           SQL
      productname
                                    price_in_usd
      character varying (100)
                                    numeric (10.2)
       Chai
                                              18.00
2
       Chang
                                              19.00
       Aniseed Syrup
3
                                              10.00
       Chef Anton's Cajun Seasoning
4
                                              22.00
       Chef Anton's Gumbo Mix
5
                                              21.35
       Grandma's Boysenberry Spread
                                              25.00
6
       Uncle Bob's Organic Dried Pears
7
                                              30.00
       Northwoods Cranberry Sauce
                                              40.00
8
       Mishi Kobe Niku
                                              97.00
 Total rows: 77
                 Query complete 00:00:00.222
```

3) Filtering

• Get all customers from Germany.





Retrieve all orders placed in 1997 (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))

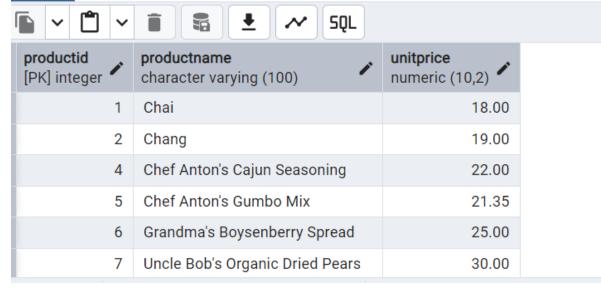
```
56 v select * from orders1
     where extract (year from orderdate) = 1997
58
     and (freight > 50 or shippeddate is not null);
60 v select productid , productname ,unitprice from products
     where unitprice > 15;
Data Output Messages Notifications
    5
                          #
                                                                                shipperid
                                  employeeid ,
                                                                    shippeddate
                                             orderdate
                customerid
                                                                                          freight
                                                       requireddate
                character varying (5)
                                                                                         numeric (10,2)
```

4) Filtering

 Retrieve the product_id, product_name, and unit_price of products where the unit_price is greater than 15.

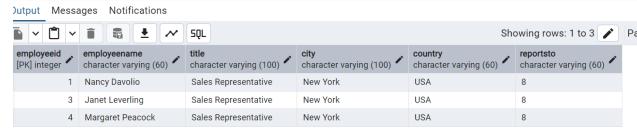
select productid , productname ,unitprice from products
where unitprice > 15;

Output Messages Notifications



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

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



•

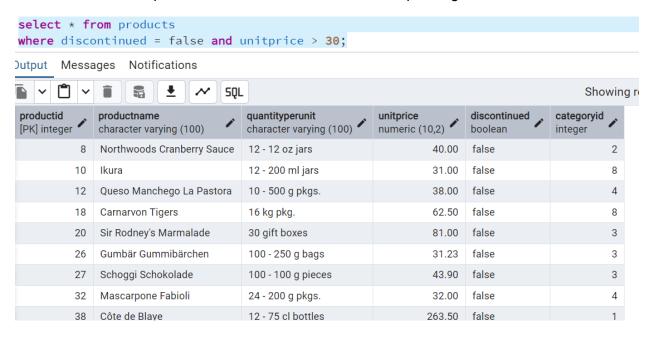
•

•

•

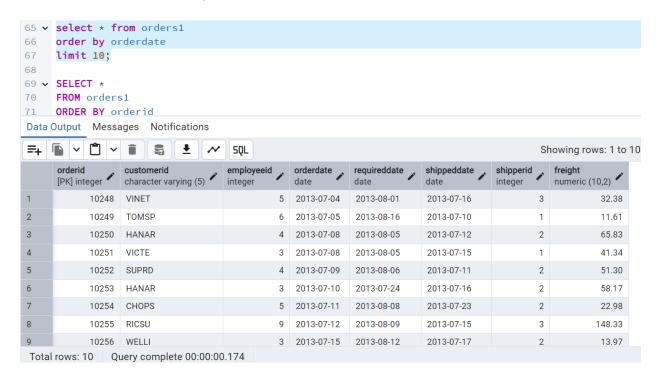
•

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

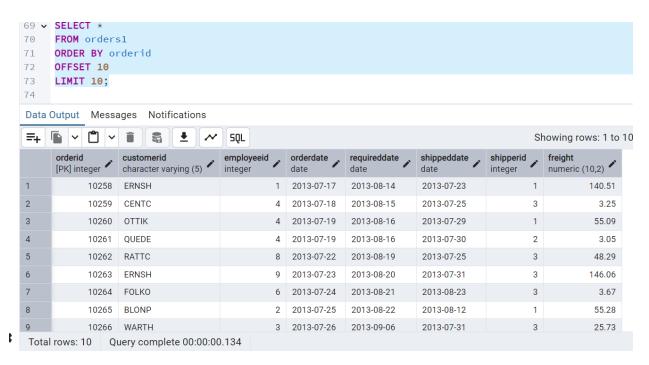


LIMIT/FETCH

1. Retrieve the first 10 orders from the orders table.

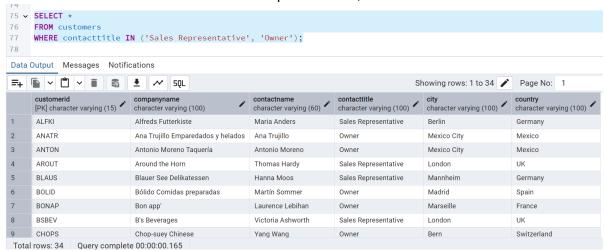


2. Retrieve orders starting from the 11th order, fetching 10 rows (i.e., fetch rows 11-20).

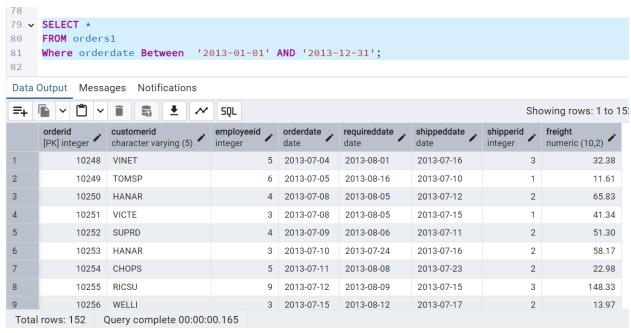


6) Filtering (IN, BETWEEN)

· List all customers who are either Sales Representative, Owner

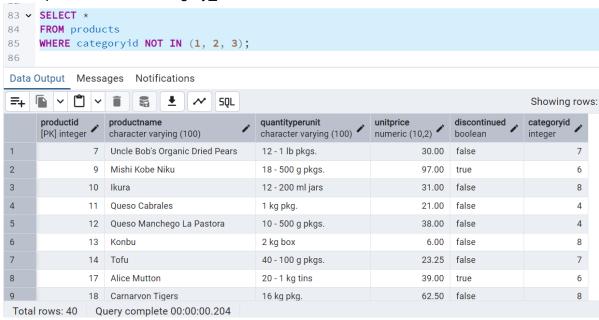


Retrieve orders placed between January 1, 2013, and December 31, 2013.



7) Filtering

• List all products whose category id is not 1, 2, or 3.



Find customers whose company name starts with "A".

