

Creating a SaleCo Relational Database on local machine

Use the SaleCo ERD listed below and the provided SQL scripts to construct its relational database and answer the following queries:

1. Write a query to count the number of invoices.

```
SELECT COUNT(*) FROM INVOICE;
```

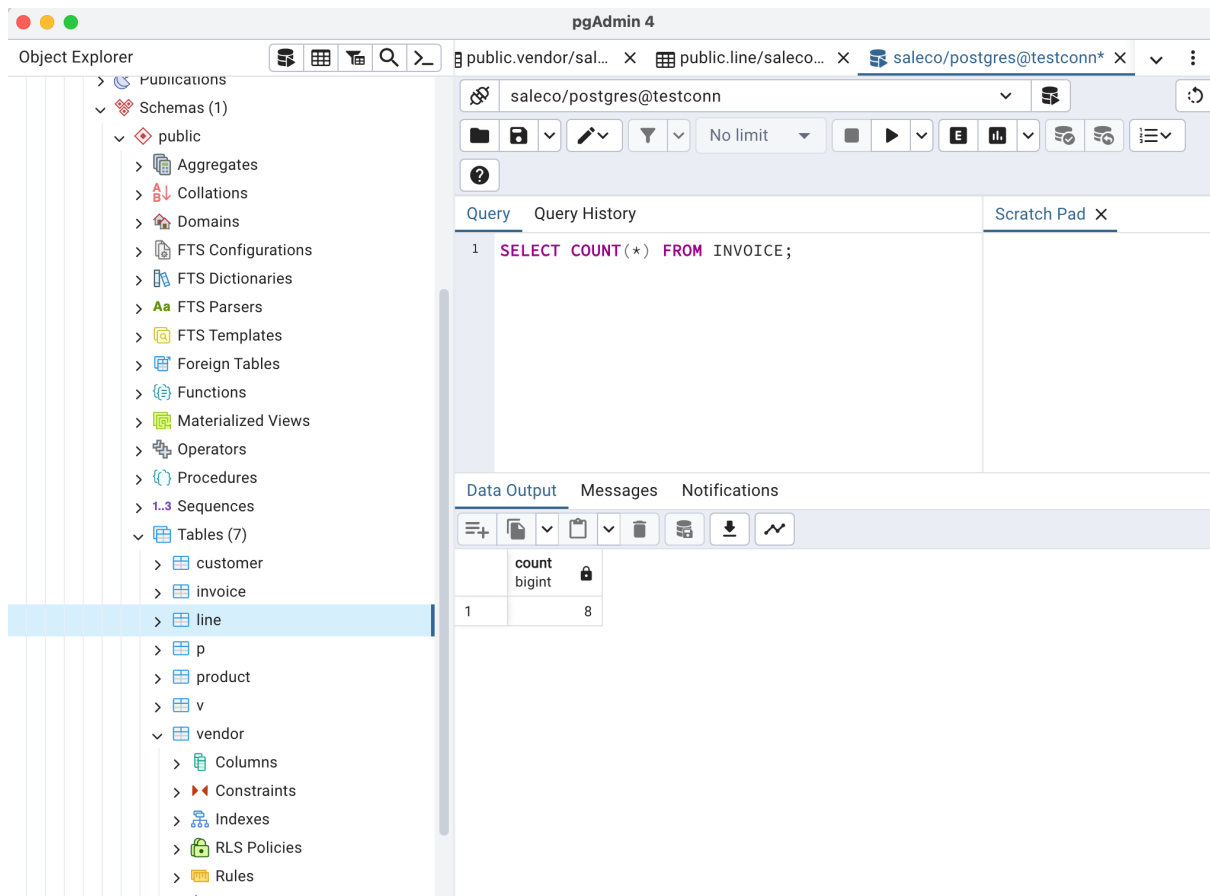


Figure 1

2. Write a query to count the number of customers with a customer balance over \$500.

```
SELECT COUNT(*)  
FROM CUSTOMER  
WHERE CUS_BALANCE >500;
```

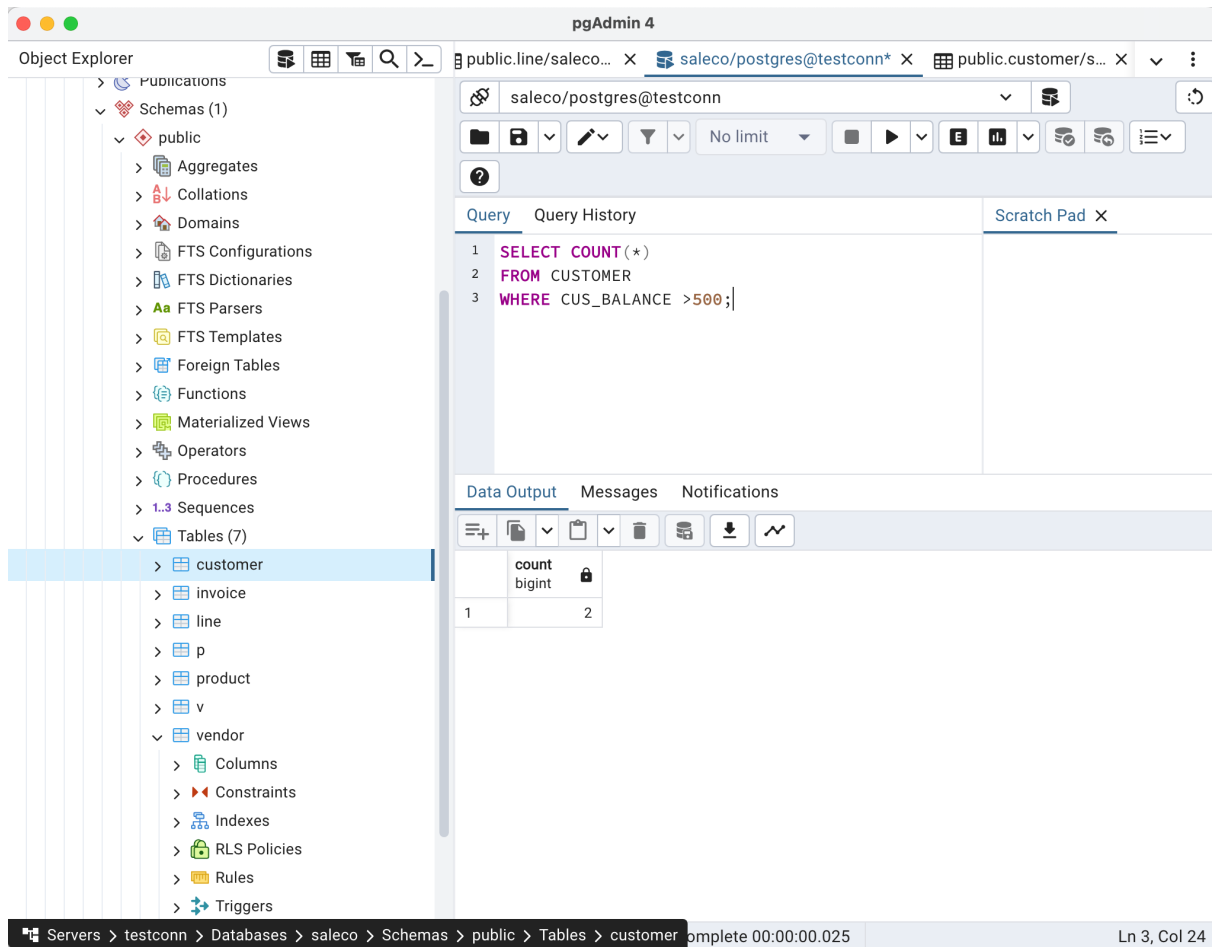


Figure 2

3. Generate a listing of all purchases made by the customers.

```
SELECT INVOICE.CUS_CODE, INVOICE.INV_NUMBER, INVOICE.INV_DATE,
PRODUCT.P_DESCRIPT, LINE.LINE_UNITS, LINE.LINE_PRICE
FROM CUSTOMER, INVOICE, LINE, PRODUCT
WHERE CUSTOMER.CUS_CODE = INVOICE.CUS_CODE
AND INVOICE.INV_NUMBER = LINE.INV_NUMBER
AND PRODUCT.P_CODE = LINE.P_CODE
ORDER BY INVOICE.CUS_CODE, INVOICE.INV_NUMBER, INVOICE.INV_DATE,
PRODUCT.P_DESCRIPT;
```

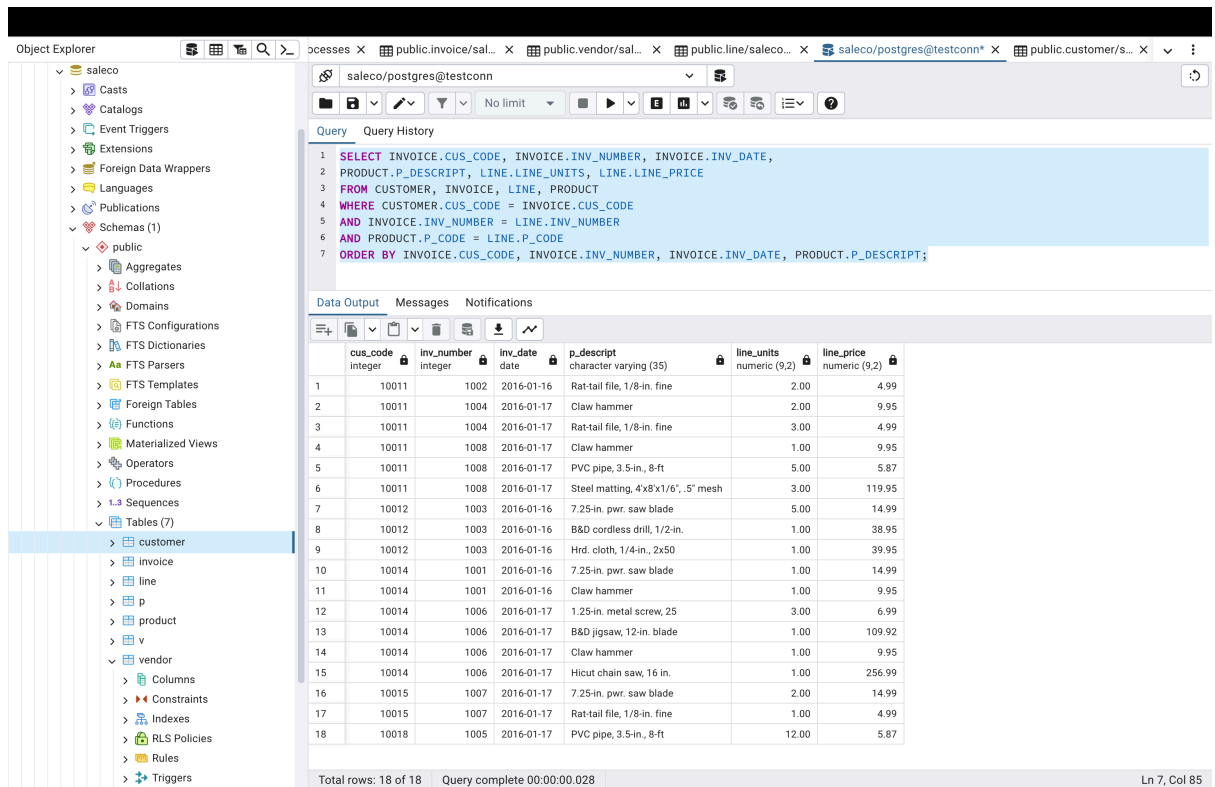


Figure 3

4. Generate the listing of customer purchases, including the subtotals for each of the invoice line numbers.

```

SELECT INVOICE.CUS_CODE, INVOICE.INV_NUMBER, PRODUCT.P_DESCRIPTION,
LINE.LINE_UNITS AS UnitsBought, LINE.LINE_PRICE AS UnitPrice,
LINE.LINE_UNITS*LINE.LINE_PRICE AS Subtotal
FROM CUSTOMER, INVOICE, LINE, PRODUCT
WHERE CUSTOMER.CUS_CODE = INVOICE.CUS_CODE
AND INVOICE.INV_NUMBER = LINE.INV_NUMBER
AND PRODUCT.P_CODE = LINE.P_CODE
ORDER BY INVOICE.CUS_CODE, INVOICE.INV_NUMBER, PRODUCT.P_DESCRIPTION;

```

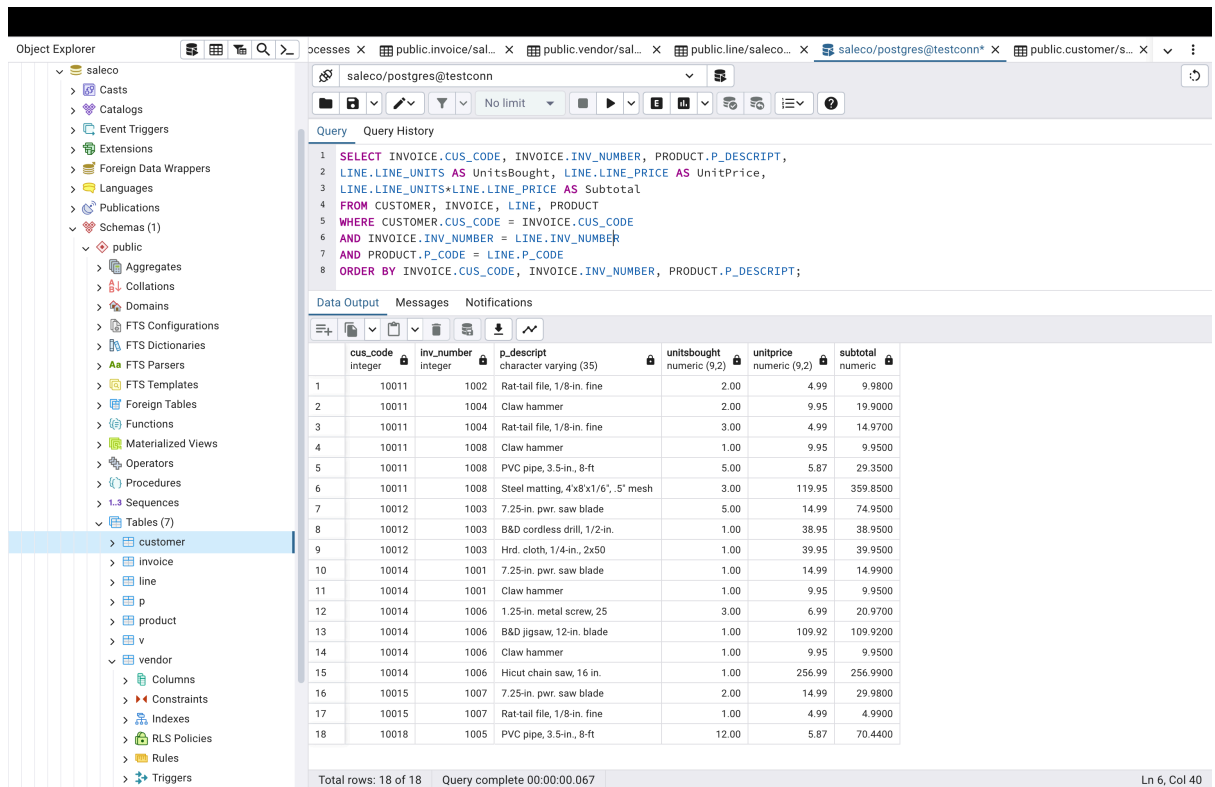


Figure 4

- List the balance characteristics of the customers who have made purchases during the current invoice cycle—that is, for the customers who appear in the INVOICE table.

```

SELECT CUS_CODE, CUS_BALANCE
FROM CUSTOMER
WHERE CUSTOMER.CUS_CODE IN (SELECT DISTINCT CUS_CODE FROM INVOICE );

```

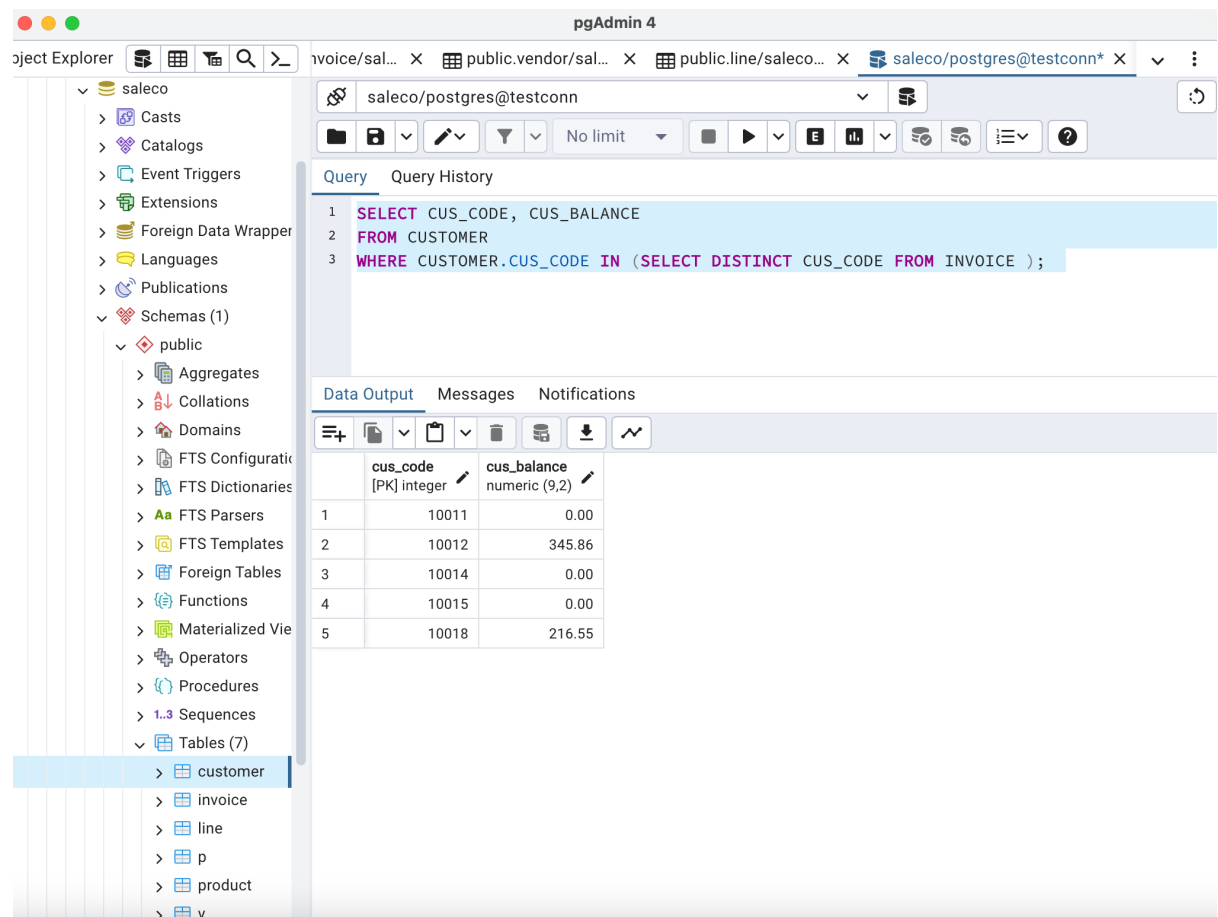


Figure 5

6. Find the listing of customers who did not make purchases during the invoicing period.

```

SELECT CUS_CODE, CUS_BALANCE
FROM CUSTOMER
WHERE CUSTOMER.CUS_CODE NOT IN (SELECT DISTINCT CUS_CODE FROM INVOICE);

```

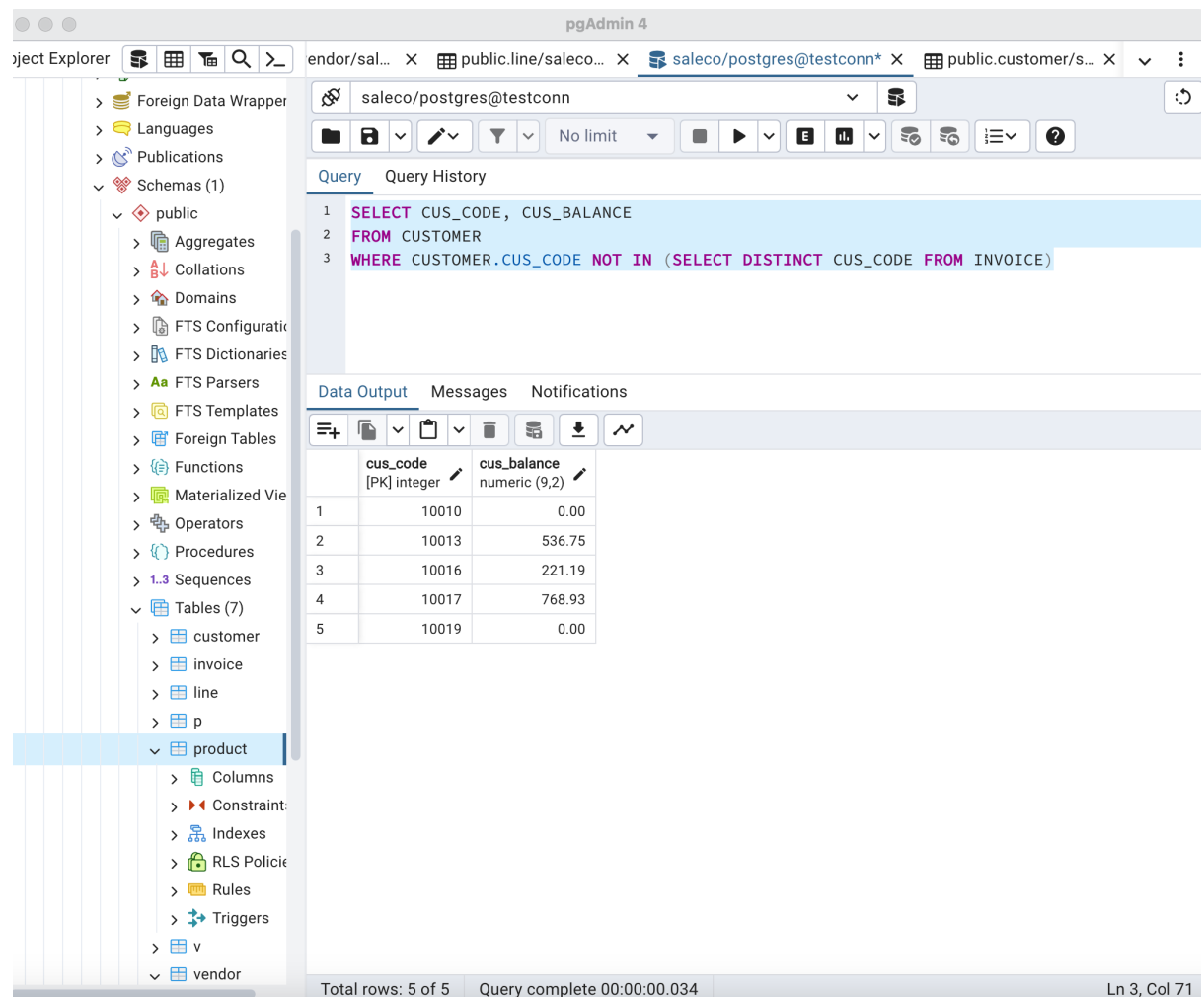


Figure 6

7. Create a query to produce the summary of the value of products currently in inventory.

We have created a new column of subtotal by taking product of Price and Quantity.

```

SELECT P_DESCRIPT, P_QOH, P_PRICE, P_QOH*P_PRICE AS Subtotal_UNITXPRICE
FROM PRODUCT
ORDER BY P_DESCRIPT;

```

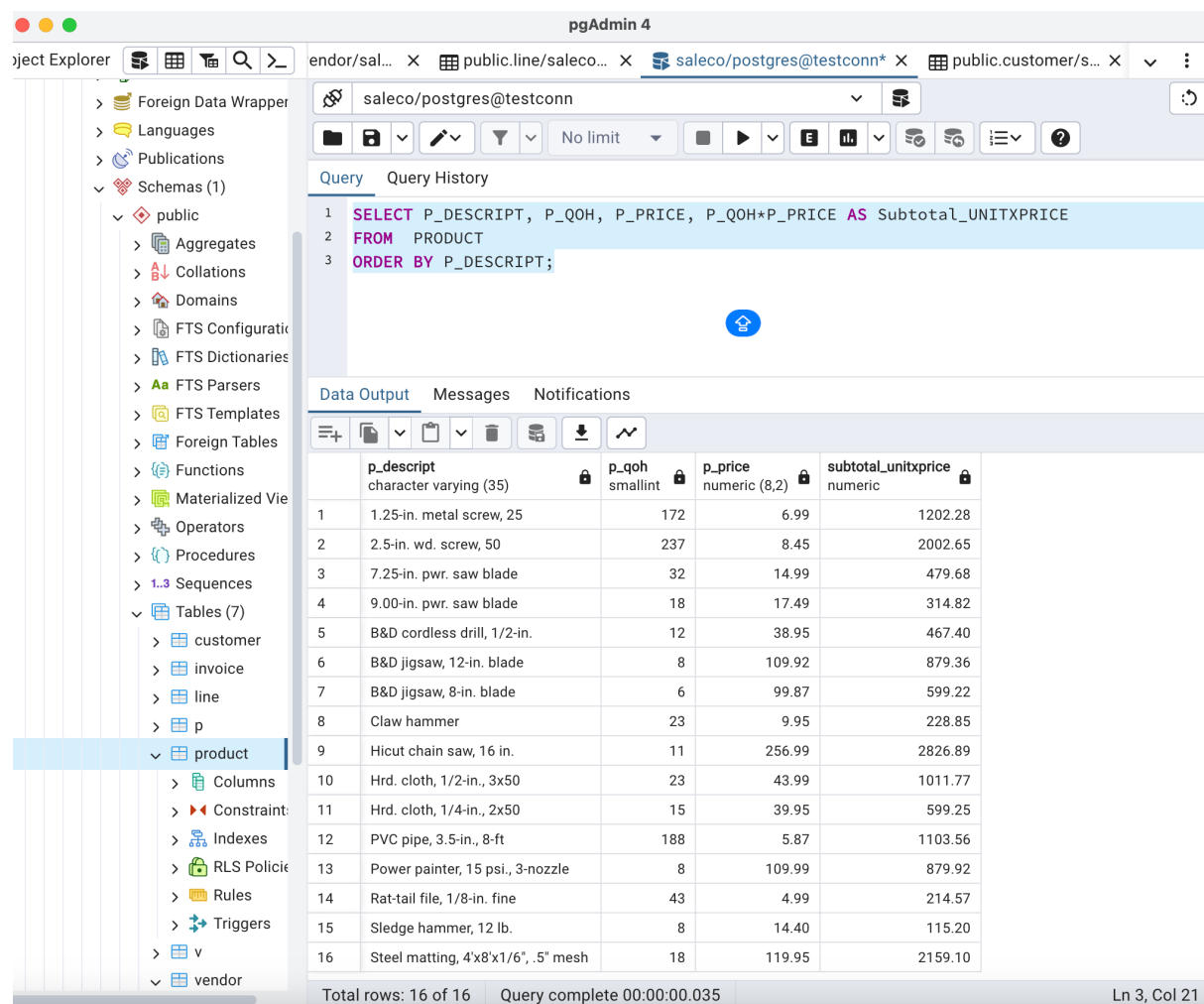


Figure 7
