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; pgAdmin 4 Object Explorer \$ ⊞ Ta Q > Bpublic.vendor/sal... X ⊞ public.line/saleco... X \$ saleco/postgres@testconn* X ✓ : > 🕓 Publications v 🕵 ■ P V V V No limit ▼ ■ P V E M V % % \= V 📀 public > 🖟 Aggregates > Å↓ Collations Query Query History Scratch Pad X > 🏠 Domains > 🖟 FTS Configurations 1 SELECT COUNT(*) FROM INVOICE; > 🌃 FTS Dictionaries > Aa FTS Parsers > FTS Templates > 📑 Foreign Tables > 🕞 Materialized Views > 犇 Operators > (Procedures Data Output Messages Notifications > 1..3 Sequences > 🔠 customer • bigint > III invoice > 🖽 line > 🛗 p > 🏥 product > 🔡 V vendor 🖶 vendor > 🗎 Columns > > Constraints > 🤼 Indexes > 🔓 RLS Policies > 🧰 Rules

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;

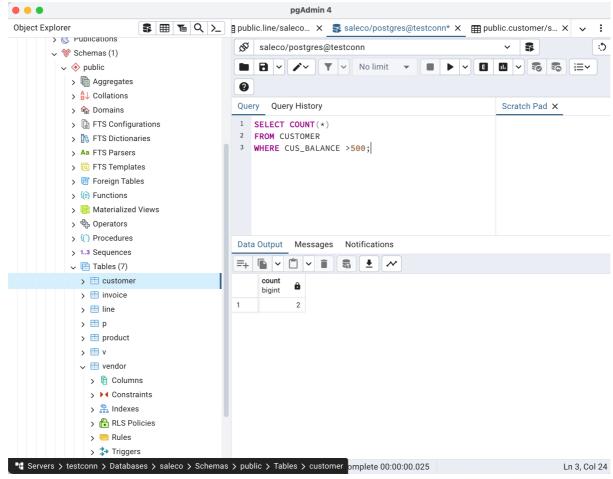


Figure 2

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;

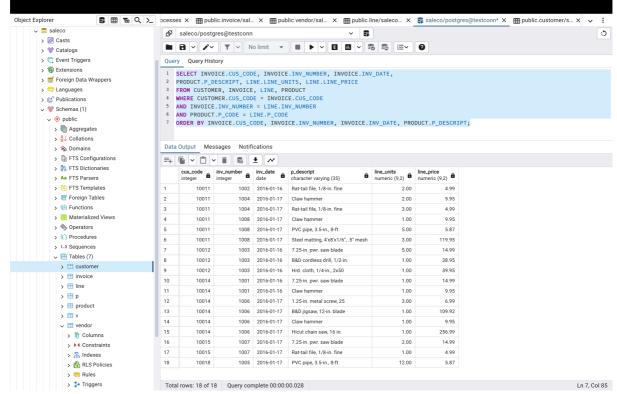


Figure 3

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_DESCRIPT,
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_DESCRIPT;

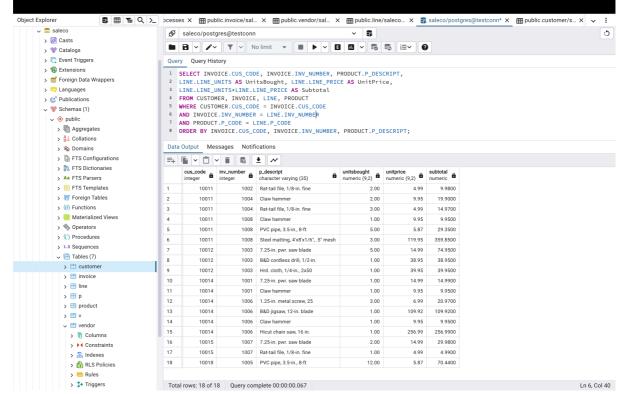


Figure 4

5. 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);

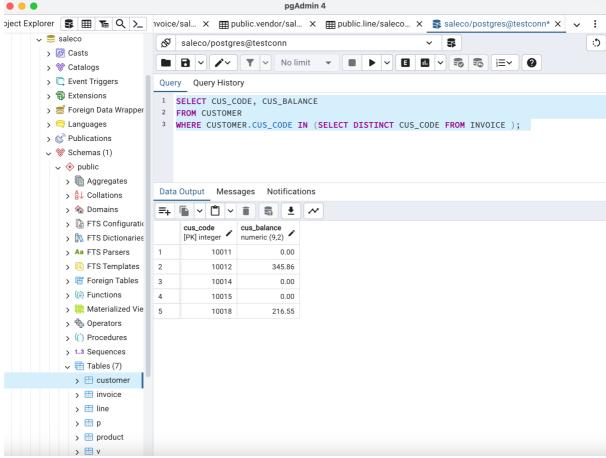


Figure 5

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);

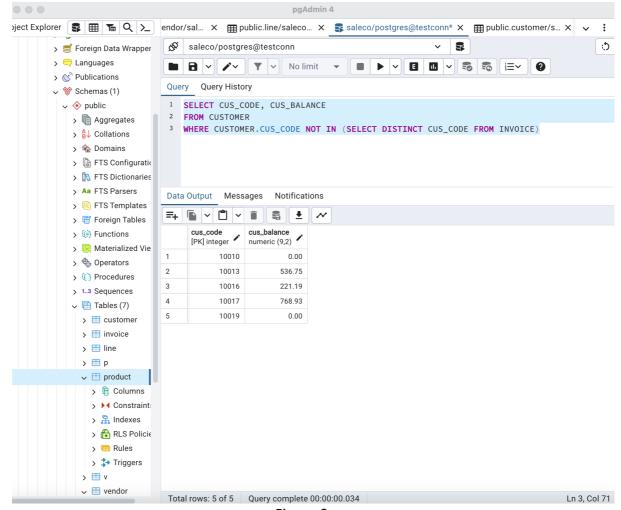


Figure 6

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;

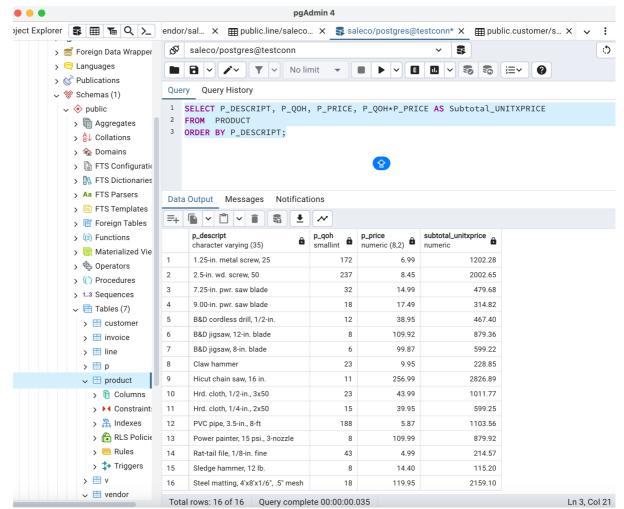


Figure 7
