Assignment 2 | MSDS 420 | Kagen Quiballo | 10/13/2021

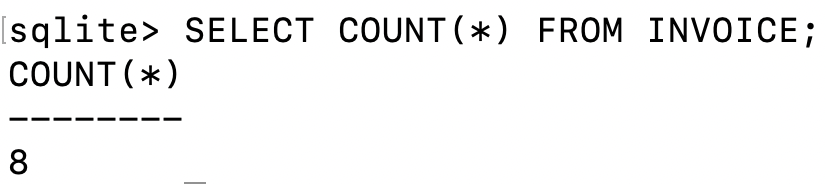
Use the SaleCo ERD listed below and the provided SQL scripts to construct its relational database and answer the following queries.

Note: Purchases = LINE\_PRICE \* LINE\_UNITS

Note: Inventory value = P\_QOH \* P\_PRICE

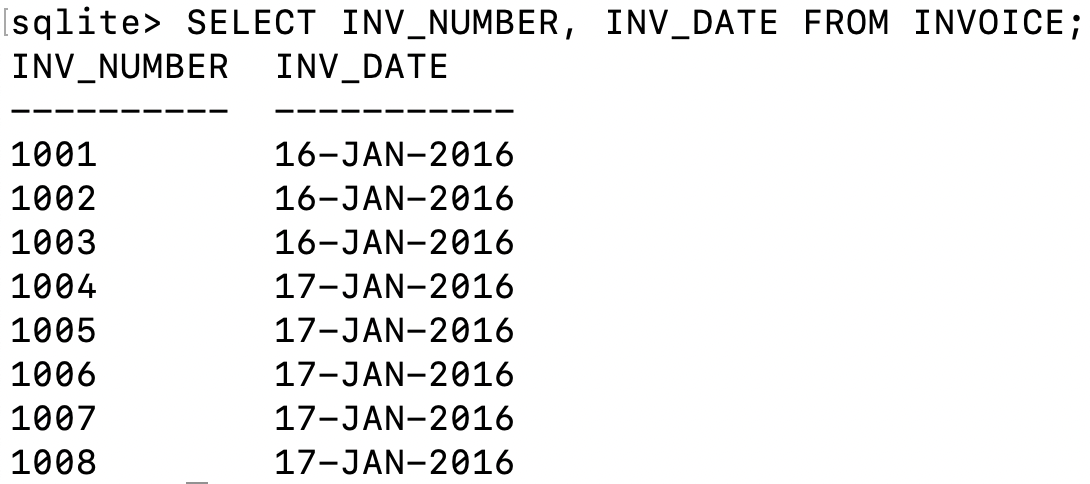
1. **(2 pts)** How many invoices are there?

SELECT COUNT(\*) FROM INVOICE; Answer: 8



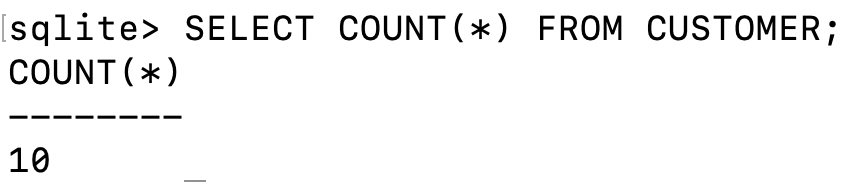
**(3 pts)** List the invoice numbers and the invoice dates.

SELECT INV\_NUMBER, INV\_DATE FROM INVOICE;



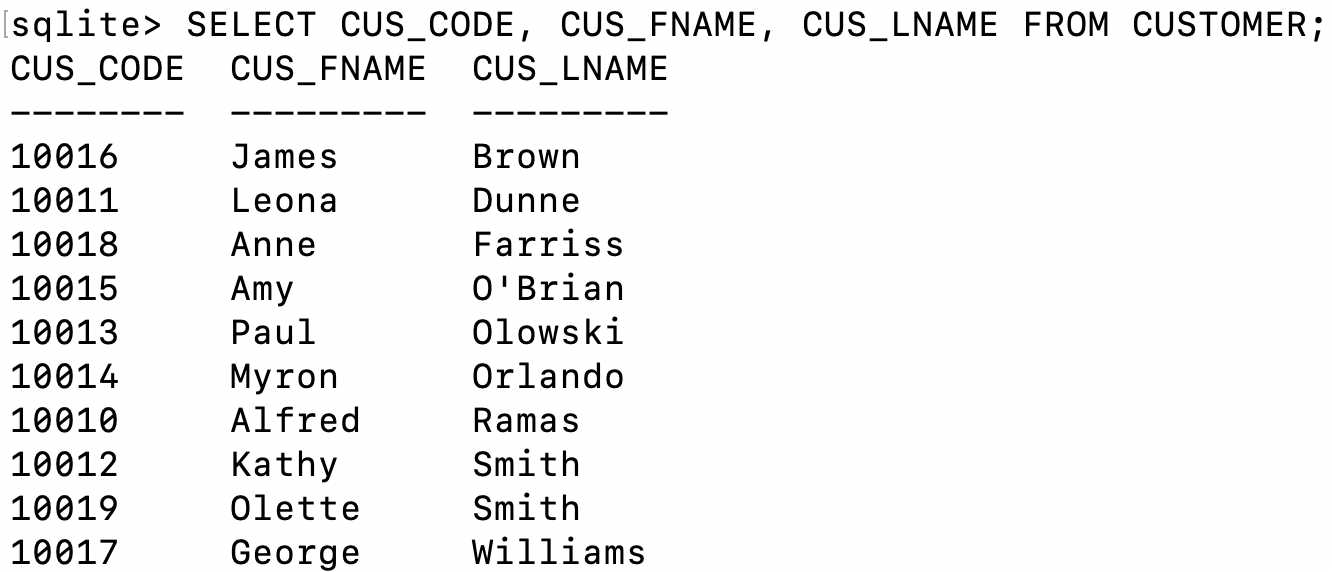
1. **(2 pts)** How many customers are there?

SELECT COUNT(\*) FROM CUSTOMER; Answer: 10



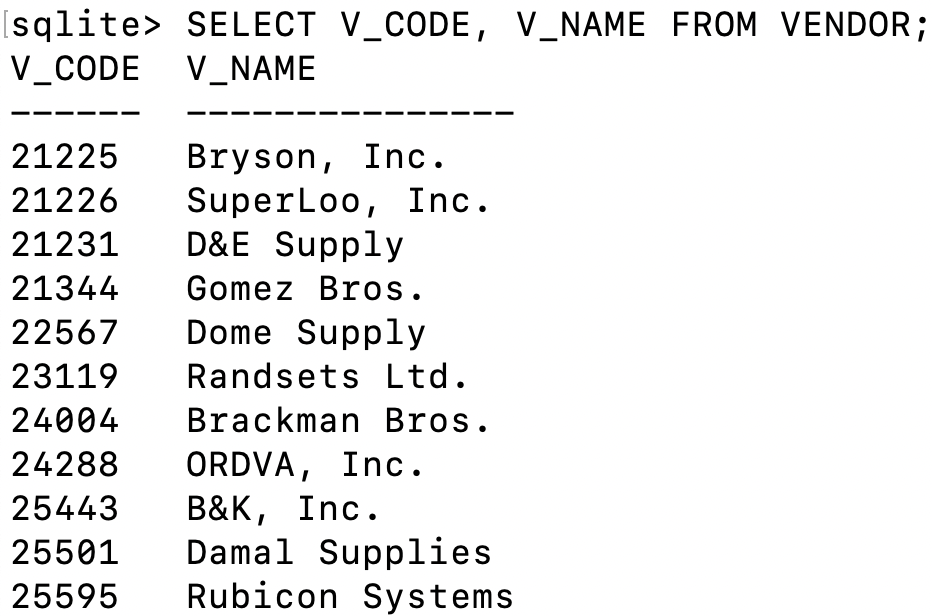
**(3 pts)** List the customer codes and customer names.

SELECT CUS\_CODE, CUS\_FNAME, CUS\_LNAME FROM CUSTOMER;

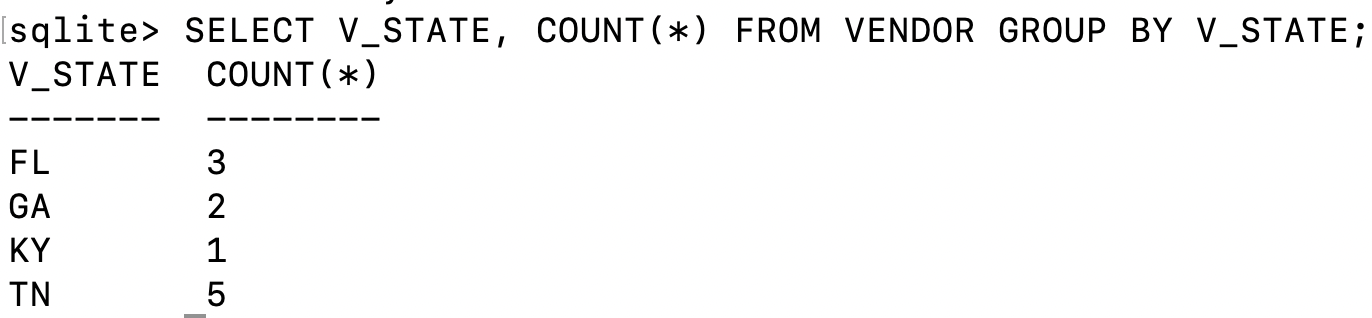


1. **(2 pts)** List vendor numbers and vendor names.

SELECT V\_CODE, V\_NAME FROM VENDOR;

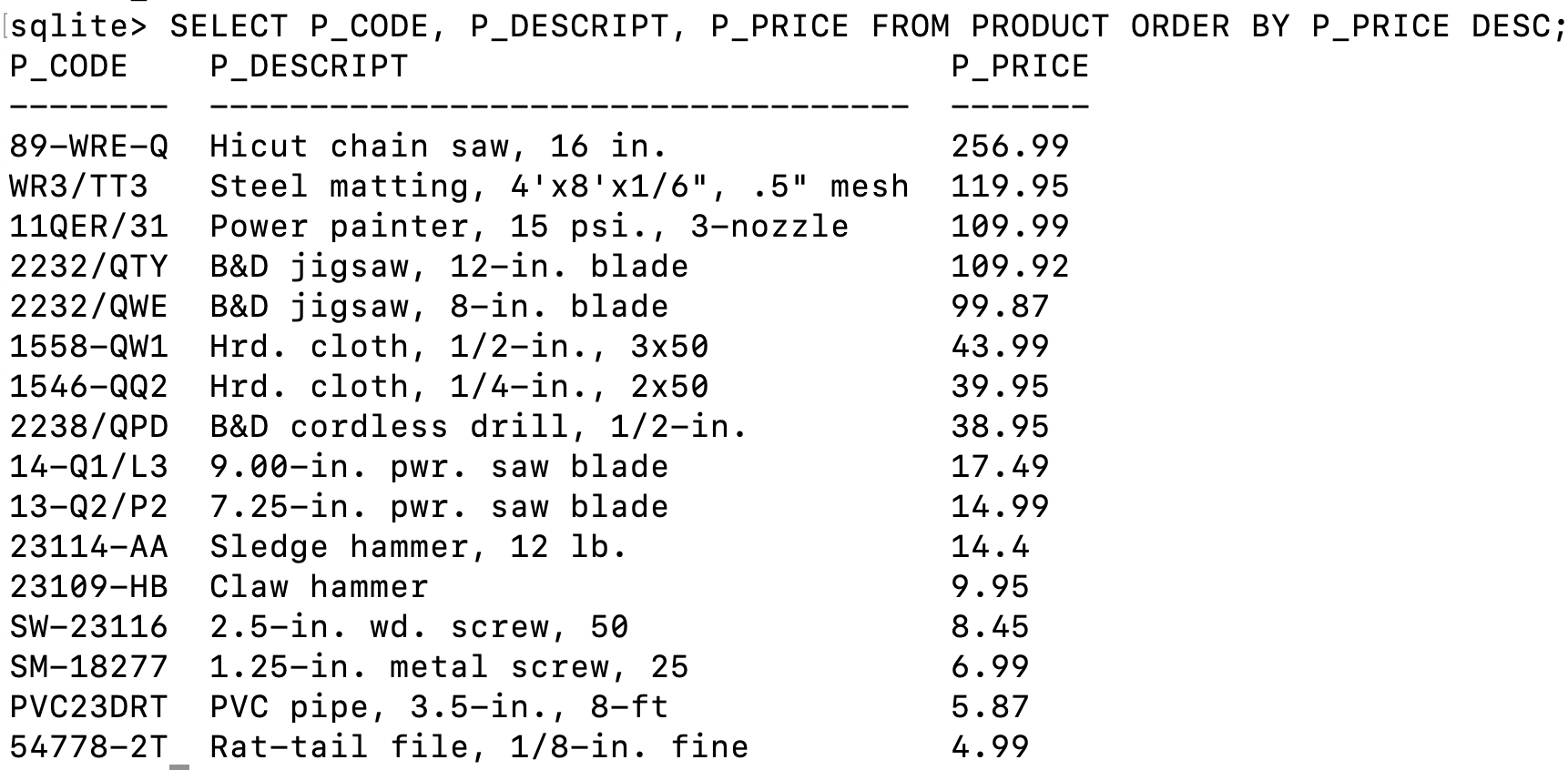


**(3 pts)** Show the vendor count per state.

SELECT V\_STATE, COUNT(\*) FROM VENDOR GROUP BY V\_STATE;

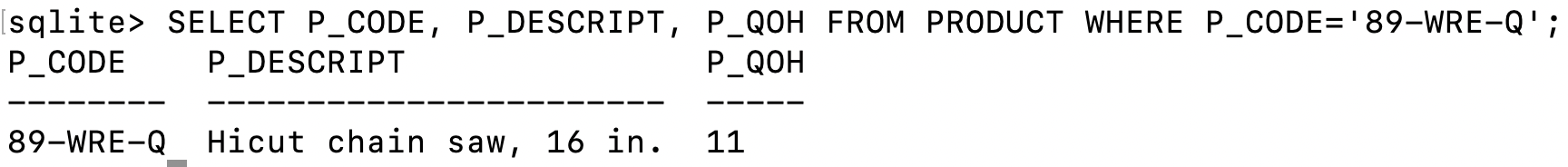
1. **(2 pts)** Based on price, what is the most expensive product?

SELECT P\_CODE, P\_DESCRIPT, P\_PRICE FROM PRODUCT ORDER BY P\_PRICE DESC; Answer: 89-WRE-Q, Hicut chain saw, 16 in. 256.99



**(3 pts)** How much quantity on hand is available for the most expensive product?

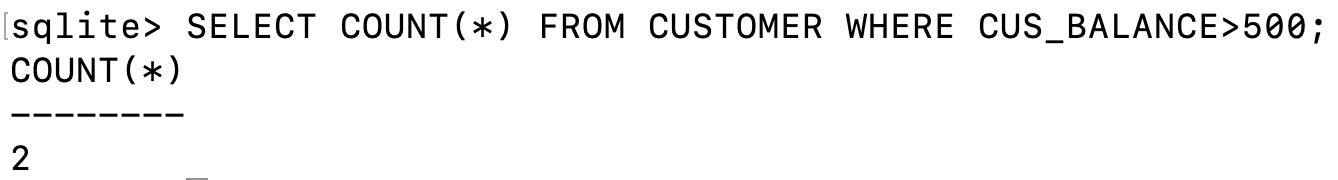
SELECT P\_CODE, P\_DESCRIPT, P\_QOH FROM PRODUCT WHERE P\_CODE=’89-WRE-Q’; Answer: 11



1. **(2 pts)** Write a query to count the number of customers with a customer balance over $500.

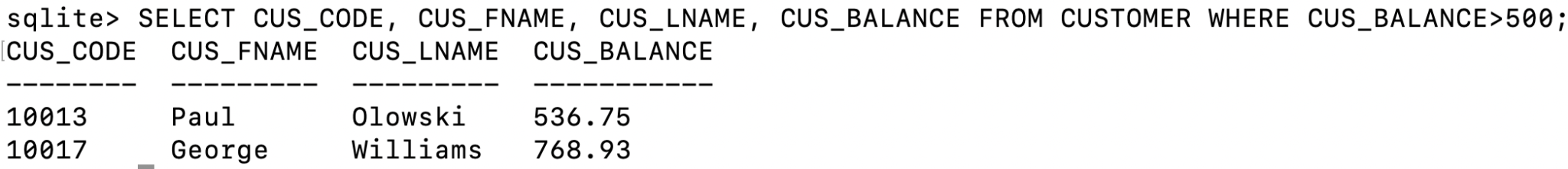
SELECT COUNT(\*) FROM CUSTOMER WHERE CUS\_BALANCE>500;

Answer: 2



**(3 pts)** List the customer code, customer name and balance amount of these customers.

SELECT CUS\_CODE, CUS\_FNAME, CUS\_LNAME, CUS\_BALANCE FROM CUSTOMER WHERE CUS\_BALANCE>500;



1. **(7 pts)** Generate a listing of products offered by each Vendor. List vendor name, product code and product name. Sort by vendor name and product code.

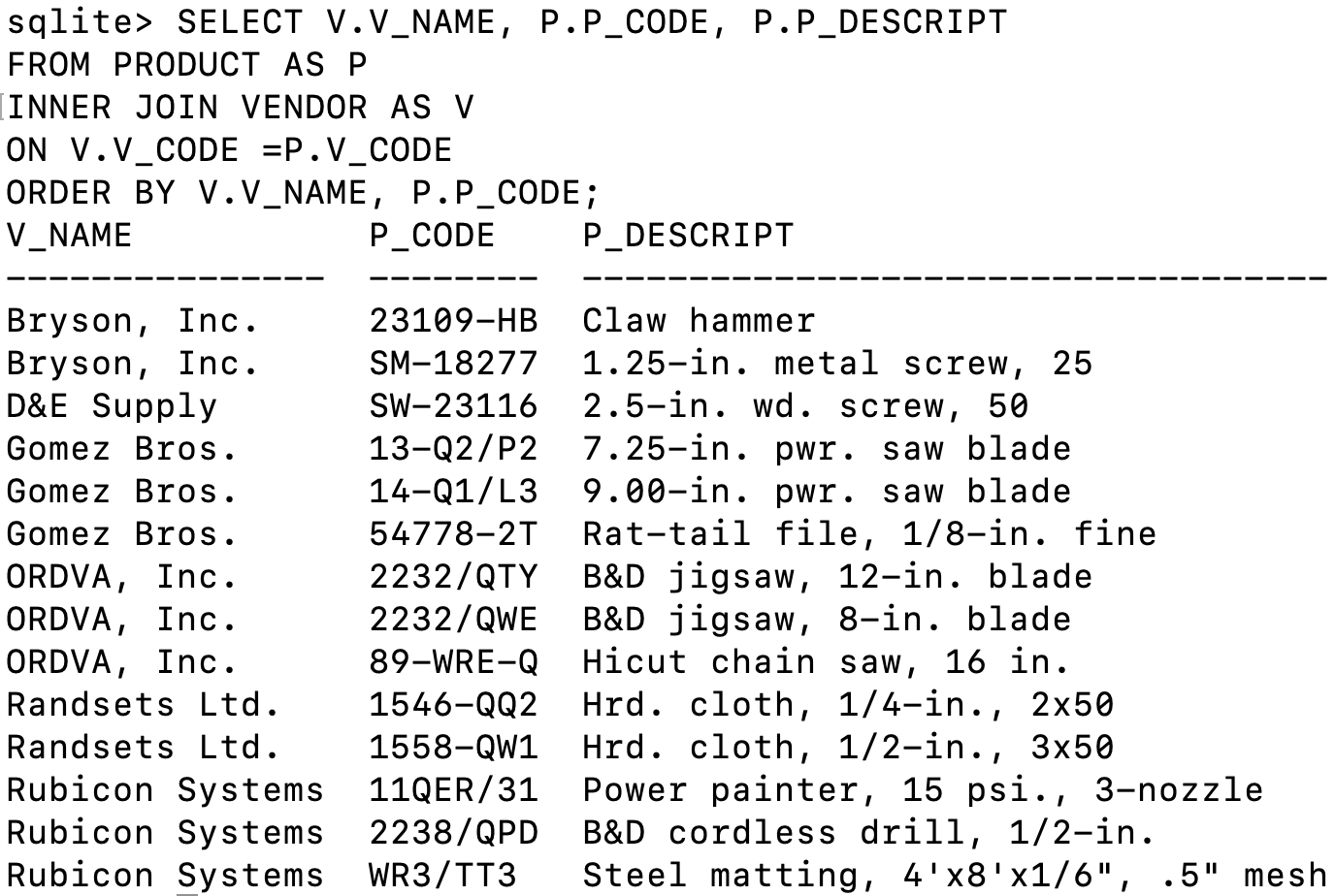
SELECT V.V\_NAME, P.P\_CODE, P.P\_DESCRIPT

FROM PRODUCT AS P

INNER JOIN VENDOR AS V

ON V.V\_CODE =P.V\_CODE

ORDER BY V.V\_NAME, P.P\_CODE;



1. **(7 pts)** Generate a listing of customer purchases, including the subtotals for each of the invoice line numbers; sort output by customer code, invoice number and the line\_number.

SELECT SUM(LINE\_PRICE \* LINE\_UNITS), I.CUS\_CODE, I.INV\_NUMBER, L.LINE\_NUMBER

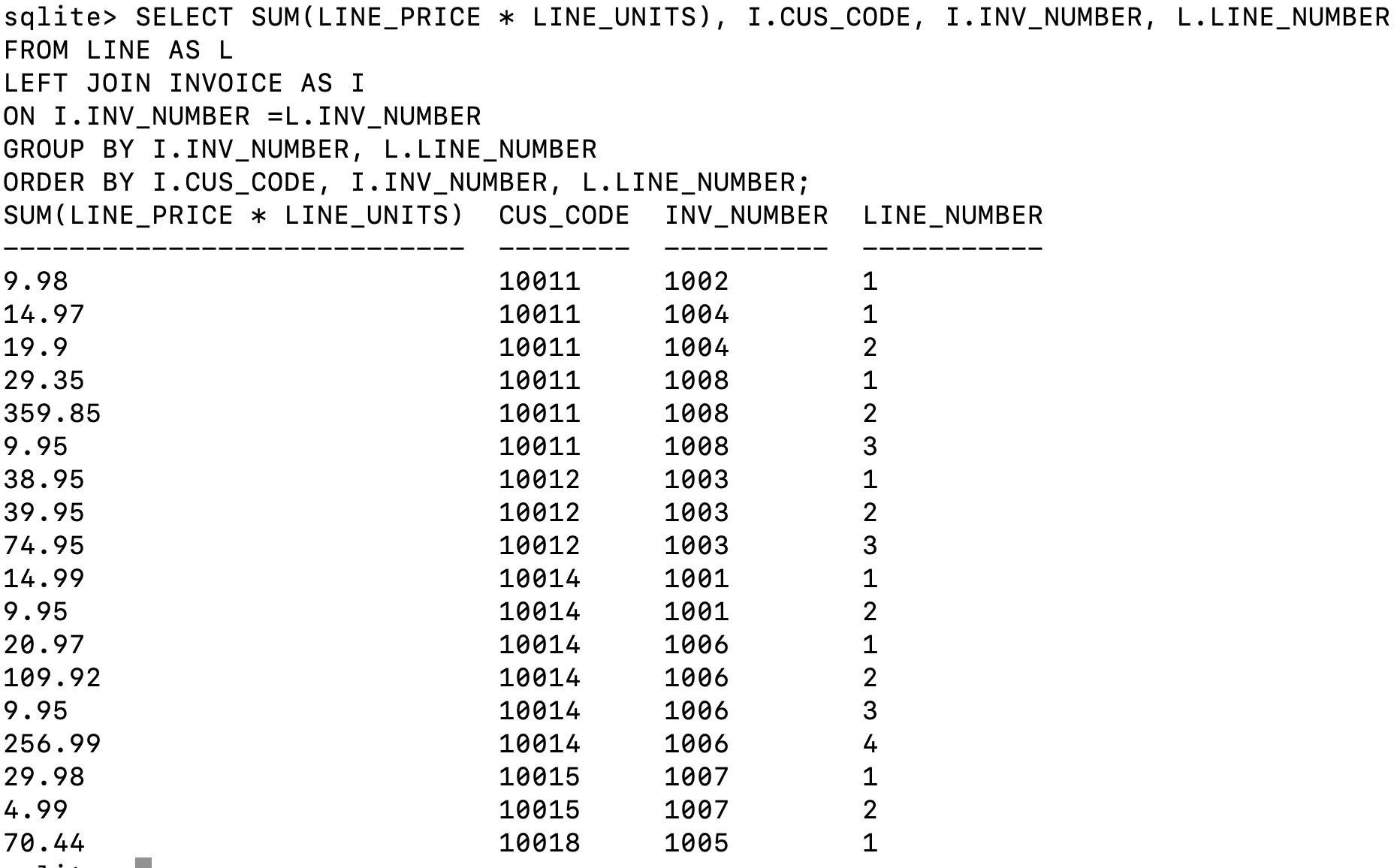
FROM LINE AS L

LEFT JOIN INVOICE AS I

ON I.INV\_NUMBER =L.INV\_NUMBER

GROUP BY I.INV\_NUMBER, L.LINE\_NUMBER

ORDER BY I.CUS\_CODE, I.INV\_NUMBER, L.LINE\_NUMBER;



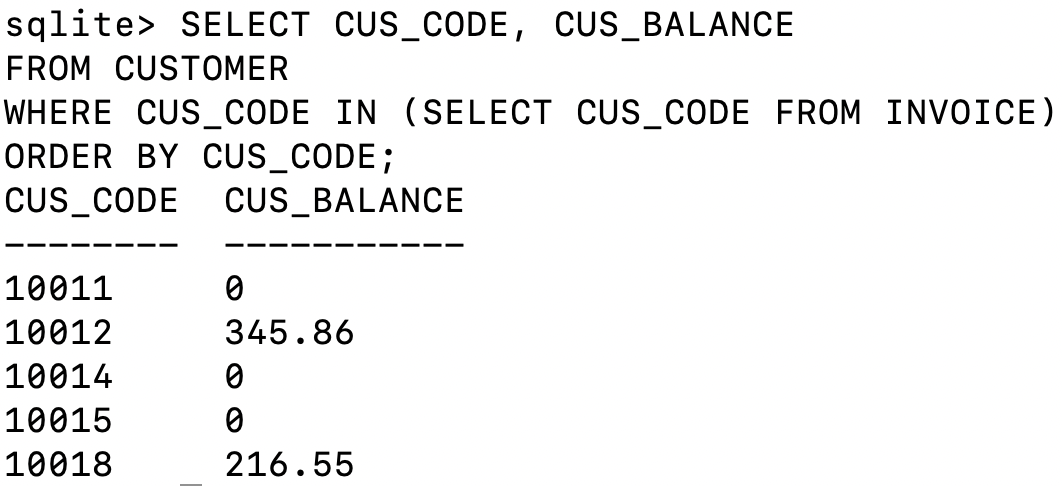
1. **(7 pts)** List the balance characteristics of the customers who have made purchases during the current invoice cycle—that is, for the customers who appear in the INVOICE table; sort by customer code.

SELECT CUS\_CODE, CUS\_BALANCE

FROM CUSTOMER

WHERE CUS\_CODE IN (SELECT CUS\_CODE FROM INVOICE)

ORDER BY CUS\_CODE;



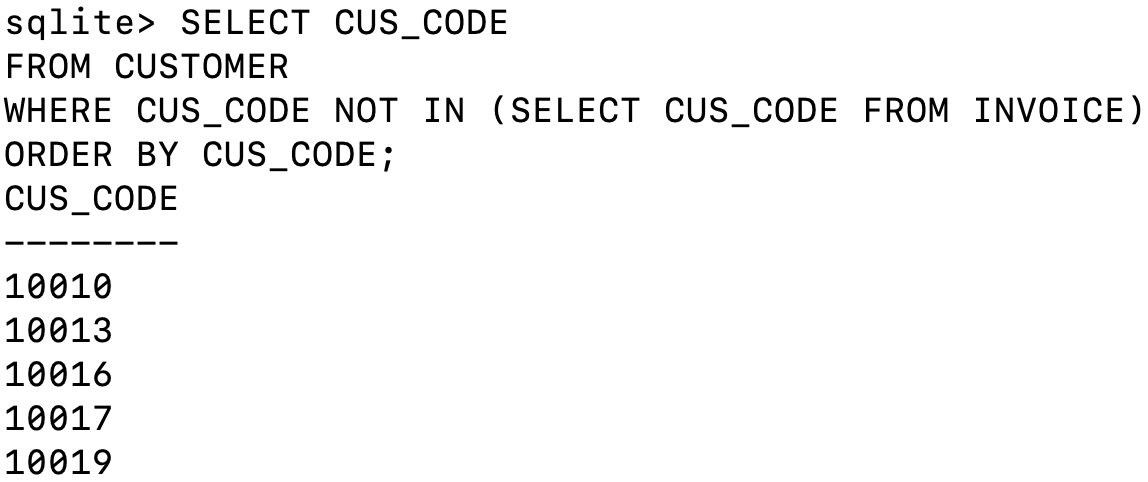
1. **(7 pts)** Find a listing of customers who did not make purchases during the invoicing period; sort by customer code.

SELECT CUS\_CODE

FROM CUSTOMER

WHERE CUS\_CODE NOT IN (SELECT CUS\_CODE FROM INVOICE)

ORDER BY CUS\_CODE;



1. **(7 pts)** Create a query to produce a summary of the value of products currently in inventory.

SELECT P\_CODE, P\_DESCRIPT, P\_QOH, P\_PRICE, P\_QOH \* P\_PRICE AS VALUE

FROM PRODUCT

ORDER BY P\_CODE;

