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CIS 310-02

Week 10 Assignment

Using the database structures depicted in Figures 7.9, 7.11, 7.12. 7.13 7.14,7.15, 7.16 on pages 325 to 327 of your textbook, write the SQL commands to answer problems asked in questions: 9 to16.

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

SELECT COUNT(\*) FROM INVOICE;

10. Write a query to count the number of customers with a balance of more than $500

SELECT COUNT(\*)

FROM CUSTOMER

WHERE CUS\_BALANCE > 500;

11. Generate a listing of all purchases made by the customers, using the output shown in Figure P7.11 as your guide. Sort the results by customer code, invoice number, and product description

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, PRODUCT.P\_DESCRIPT;

This code was tested using Microsoft Access SQL.

12.

SELECT INVOICE.CUS\_CODE, INVOICE.INV\_NUMBER, PRODUCT.P\_DESCRIPT,

LINE.LINE\_UNITS AS [Units Bought], LINE.LINE\_PRICE AS [Unit Price], 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;

Used code from my answer on number 11 to answer 12 the code added was highlighted in red color.

13.

SELECT INVOICE.CUS\_CODE, CUSTOMER.CUS\_BALANCE,

ROUND(Sum(LINE.LINE\_UNITS\*LINE.LINE\_PRICE), 2) AS 'Total Purchases'

FROM CUSTOMER, INVOICE, LINE

WHERE INVOICE.INV\_NUMBER = LINE.INV\_NUMBER

AND CUSTOMER.CUS\_CODE = INVOICE.CUS\_CODE GROUP BY INVOICE.CUS\_CODE, CUSTOMER.CUS\_BALANCE;

Solved using Access SQL

14.

SELECT INVOICE.CUS\_CODE, CUSTOMER.CUS\_BALANCE,

Sum (LINE.LINE\_UNITS\*LINE.LINE\_PRICE) AS [Total Purchases],

Count (\*) AS [Number of Purchases]

FROM CUSTOMER, INVOICE, LINE

WHERE INVOICE.INV\_NUMBER = LINE.INV\_NUMBER

AND CUSTOMER.CUS\_CODE = INVOICE.CUS\_CODE

GROUP BY INVOICE.CUS\_CODE, CUSTOMER.CUS\_BALANCE;

15.

SELECT CUSTOMER.CUS\_CODE, CUSTOMER.CUS\_BALANCE, Sum([LINE\_UNITS]\*[LINE\_PRICE]) AS [Total Purchases],

Count(LINE.INV\_NUMBER) AS [Number of Purchases],

Avg([LINE\_UNITS]\*[LINE\_PRICE]) AS [Average Purchase Amount]

FROM CUSTOMER INNER JOIN (INVOICE INNER JOIN LINE ON INVOICE.INV\_NUMBER = LINE.INV\_NUMBER) ON CUSTOMER.CUS\_CODE = INVOICE.CUS\_CODE

GROUP BY CUSTOMER.CUS\_CODE, CUSTOMER.CUS\_BALANCE;

16.

SELECT LINE.INV\_NUMBER, Sum([LINE]![LINE\_UNITS]\*[LINE]![LINE\_PRICE]) AS Expr1

FROM LINE

GROUP BY LINE.INV\_NUMBER;