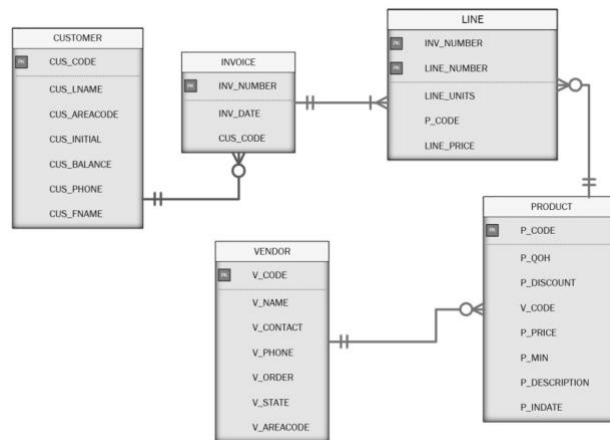


Gurjus Singh

MSDS 420: DATABASE SYSTEMS AND DATA PREPERATION

ASSIGNMENT 2

MAY 10TH, 2020



1.) There are 8 invoices in the INVOICE relation. The INVOICE numbers and dates are:

SQL QUERY: SELECT * FROM INVOICE;

| INV_NUMBER | INV_DATE |
|------------|---------------------------------|
| 1001 | January 16 th , 2016 |
| 1002 | January 16 th , 2016 |
| 1003 | January 16 th , 2016 |
| 1004 | January 17 th , 2016 |
| 1005 | January 17 th , 2016 |
| 1006 | January 17 th , 2016 |
| 1007 | January 17 th , 2016 |
| 1008 | January 17 th , 2016 |

2. There are 10 customers in the CUSTOMER relation. The customer names and codes are listed below:

SQL QUERY: SELECT CUS_CODE, CUS_FNAME, CUS_LNAME FROM CUSTOMER;

| CUS_CODE | FIRST NAME | LAST NAME |
|----------|------------|-----------|
| 10016 | James | Brown |
| 10011 | Leona | Dunne |

| | | |
|-------|--------|----------|
| 10018 | Anne | Farrias |
| 10015 | Ammy | O'Brian |
| 10013 | Paul | Olowski |
| 10014 | Myron | Orlando |
| 10010 | Alfred | Ramas |
| 10012 | Kathy | Smith |
| 10019 | Olette | Smith |
| 10017 | George | Williams |

3.

SQL QUERY: SELECT V_CODE, V_NAME FROM VENDOR;

| V_CODE | V_NAME |
|--------|-----------------|
| 21225 | Bryson, Inc. |
| 21226 | SuperLoo, Inc. |
| 21231 | D&E Supply |
| 21344 | Gomez Bros. |
| 22567 | Dome Supply |
| 23119 | Randssets Ltd. |
| 24004 | Brackman Bros. |
| 24288 | ORDVA, Inc. |
| 25443 | B&K, Inc. |
| 25501 | Damal Supplies |
| 25595 | Rubicon Systems |

QUERY: SELECT V_STATE, COUNT(V_NAME) FROM VENDOR GROUP BY V_STATE;

| V_STATE | COUNT ON VENDORS |
|---------|------------------|
| FL | 3 |
| GA | 2 |
| KY | 1 |
| TN | 5 |

4.

QUERY: SELECT P_DESCRIPT,P_QOH,P_PRICE FROM PRODUCT ORDER BY P_PRICE DESC;

The most expensive product is: Hicut chain saw, 16 in, and the quantity on hand is 11.

5. QUERY: SELECT COUNT(CUS_CODE) FROM CUSTOMER WHERE CUS_BALANCE > 500;

The number of customers that have a balance over 500 is 2. Below is the query to list the customers and their names and balance.

QUERY: SELECT CUS_CODE, CUS_FNAME, CUS_LNAME, CUS_BALANCE FROM CUSTOMER WHERE CUS_BALANCE > 500;

CUSTOMERS WITH PRICE OVER 500:

| CUS_CODE | CUS_FNAME | CUS_LNAME | CUS_BALANCE |
|----------|-----------|-----------|-------------|
| 10013 | Paul | Olowski | 536.75 |
| 10017 | George | Williams | 768.93 |

6. QUERY: SELECT V_NAME, P_CODE, P_DESCRIPT FROM PRODUCT AS P, VENDOR AS V WHERE P.V_CODE = V.V_CODE ORDER BY V_NAME, P_CODE;

HERE IS A LIST OF PRODUCTS THAT EACH VENDOR HAS:

| V_NAME | P_CODE | P_DESCRIPT |
|-----------------|----------|-------------------------------------|
| Bryson, Inc. | 23109-HB | Claw hammer |
| Bryson, Inc. | SM-18277 | 1.25-in. metal screw, 25 |
| D&E Supply | SW-2311 | 62.5-in. wd. screw, 50 |
| Gomez Bros. | 13-Q2/P2 | 7.25-in. pwr. saw blade |
| Gomez Bros. | 14-Q1/L3 | 9.00-in. pwr. saw blade |
| Gomez Bros. | 54778-2T | Rat-tail file, 1/8-in. fine |
| ORDVA, Inc. | 2232/QTY | B&D jigsaw, 12-in. blade |
| ORDVA, Inc. | 2232/QWE | B&D jigsaw, 8-in. blade |
| ORDVA, Inc. | 89-WRE-Q | Hicut chain saw, 16 in. |
| Randssets Ltd. | 1546-QQ2 | Hrd. cloth, 1/4-in., 2x50 |
| Randssets Ltd. | 1558-QW1 | Hrd. cloth, 1/2-in., 3x50 |
| Rubicon Systems | 11QER/31 | Power painter, 15 psi., 3-nozzle |
| Rubicon Systems | 2238/QPD | B&D cordless drill, 1/2-in. |
| Rubicon Systems | WR3/TT3 | Steel matting, 4'x8'x1/6", .5" mesh |

7.

QUERY:

SELECT CUS_CODE, I.INV_NUMBER, LINE_NUMBER, LINE_PRICE, LINE_UNITS,
 LINE_PRICE*LINE_UNITS as Purchase
 FROM INVOICE as I, LINE as L
 WHERE I.INV_NUMBER = L.INV_NUMBER
 ORDER BY CUS_CODE, L.INV_NUMBER, LINE_NUMBER;

| CUS_CODE | INV_NUMBER | LINE_NUMBER | LINE_PRICE | LINE_UNITS | PURCHASE |
|----------|------------|-------------|------------|------------|----------|
| 10011 | 1002 | 1 | 4.99 | 2 | 9.98 |
| 10011 | 1004 | 1 | 4.99 | 3 | 14.97 |
| 10011 | 1004 | 2 | 9.95 | 2 | 19.9 |
| 10011 | 1008 | 1 | 5.87 | 5 | 29.35 |
| 10011 | 1008 | 2 | 119.95 | 3 | 359.85 |
| 10011 | 1008 | 3 | 9.95 | 1 | 9.95 |
| 10012 | 1003 | 1 | 38.95 | 1 | 38.95 |
| 10012 | 1003 | 2 | 39.95 | 1 | 39.95 |
| 10012 | 1003 | 3 | 14.99 | 5 | 74.95 |
| 10014 | 1001 | 1 | 14.99 | 1 | 14.99 |

| | | | | | |
|-------|------|---|--------|----|--------|
| 10014 | 1001 | 2 | 9.95 | 1 | 9.95 |
| 10014 | 1006 | 1 | 6.99 | 3 | 20.97 |
| 10014 | 1006 | 2 | 109.92 | 1 | 109.92 |
| 10014 | 1006 | 3 | 9.95 | 1 | 9.95 |
| 10014 | 1006 | 4 | 256.99 | 1 | 256.99 |
| 10015 | 1007 | 1 | 14.99 | 2 | 29.98 |
| 10015 | 1007 | 2 | 4.99 | 1 | 4.99 |
| 10018 | 1005 | 1 | 5.87 | 12 | 70.44 |

The above table is the listing of Customer purchases, with subtotals per each line.

8.

QUERY: SELECT C.CUS_CODE,CUS_BALANCE FROM CUSTOMER AS C, INVOICE AS I WHERE C.CUS_CODE = I.CUS_CODE ORDER BY I.CUS_CODE;

| CUS_CODE | CUS_BALANCE |
|----------|-------------|
| 10011 | 0 |
| 10011 | 0 |
| 10011 | 0 |
| 10012 | 345.86 |
| 10014 | 0 |
| 10014 | 0 |
| 10015 | 0 |
| 10018 | 216.55 |

The Balance Characteristic for all customers who made purchases was a balance was 0, although there were two customers that still had money in their account.

9.

QUERY: SELECT C.CUS_CODE FROM CUSTOMER as C
LEFT JOIN INVOICE as I ON C.CUS_CODE = I.CUS_CODE
WHERE I.CUS_CODE IS NULL
ORDER BY C.CUS_CODE;

| CUS_CODE |
|----------|
| 10010 |
| 10013 |
| 10016 |
| 10017 |
| 10019 |

Here are all the customers who did not make a purchase.

10. QUERY: SELECT SUM(P_QOH*P_PRICE) as Summary FROM PRODUCT;

The value of products currently in inventory is: \$15,084.52.