Database: Chapter 5 Assignment 3

Complete exercises from class and TAL Distributors in text page 163, exercises 7, 8, 11, 12, 13, 14 and INNER JOIN.

Please type the query in the SQL Statement that you use in either Microsoft Access or Oracle Application Express.  Once query has run correctly and provided the results, take a screen snip of the results, and then copy into the chart below. Save this completed Word document, and submit to appropriate dropbox on myHills.

15 points

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| **Join more than two tables.**  **For each item on order, list the item number, number ordered, order number, order date, customer number and customer name, along with the last name of the sales rep who represents each customer.**  **Note 1: You list table names on the from clause.**  **Note 2: Each table needs to be related on the where clause with the other tables.** |
| **SELECT STATEMENT:**  **SELECT O.ORDER\_NUM, NUM\_ORDERED, ITEM\_NUM, ORDER\_DATE, C.CUSTOMER\_NUM, CUSTOMER\_NAME, LAST\_NAME**  **FROM ORDER\_LINE OL, ORDERS O, CUSTOMER C, REP R**  **WHERE OL.ORDER\_NUM = O.ORDER\_NUM AND C.CUSTOMER\_NUM = O.CUSTOMER\_NUM AND C.REP\_NUM = R.REP\_NUM** |
| **Results:** |
| **Alternative version using inner join.**  **For each item on order, list the item number, number ordered, order number, order date, customer number and customer name, along with the last name of the sales rep who represents each customer.**  **Note 1: Use the words INNER JOIN instead of a comma between the table names on the FROM clause**  **Note 2: Add a clause using the keyword ON to relate the tables, instead of the where clause.**  **Note 3: Two tables are related at a time, so you if you have more than two tables, you need another keyword INNER JOIN with third table after the first ON clause, and you need another ON clause for the third table, and similarly other INNER JOIN and ON clauses for the additional tables.** |
| **SELECT STATEMENT:**  SELECT O.ORDER\_NUM, NUM\_ORDERED, ITEM\_NUM, C.CUSTOMER\_NUM, CUSTOMER\_NAME  FROM ORDER\_LINE OL INNER JOIN ORDERS O ON OL.ORDER\_NUM = O.ORDER\_NUM  INNER JOIN CUSTOMER C ON C.CUSTOMER\_NUM = O.CUSTOMER\_NUM  INNER JOIN REP R ON R.REP\_NUM = C.REP\_NUM  SELECT O.ORDER\_NUM, NUM\_ORDERED, ITEM\_NUM, C.CUSTOMER\_NUM, CUSTOMER\_NAME  FROM ORDER\_LINE OL INNER JOIN ORDERS O ON OL.ORDER\_NUM = O.ORDER\_NUM  INNER JOIN CUSTOMER C ON C.CUSTOMER\_NUM = O.CUSTOMER\_NUM  INNER JOIN REP R ON R.REP\_NUM = C.REP\_NUM  WHERE CREDIT\_LIMIT = 7500  ORDER BY CUSTOMER\_NUM, ORDER\_NUM |
| **Results:** |
| **Add other criteria to multiple table join.**  **For each item on order, list the item number, number ordered, order number, order date, customer number and customer name, along with the last name of the sales rep who represents each customer.**  **List only those results for customers with credit limits of $7,500.**  **Order the results by customer number and then order number in each customer number** |
| **SELECT STATEMENT:**  SELECT O.ORDER\_NUM, NUM\_ORDERED, ITEM\_NUM, C.CUSTOMER\_NUM, CUSTOMER\_NAME  FROM ORDER\_LINE OL INNER JOIN ORDERS O ON OL.ORDER\_NUM = O.ORDER\_NUM  INNER JOIN CUSTOMER C ON C.CUSTOMER\_NUM = O.CUSTOMER\_NUM  INNER JOIN REP R ON R.REP\_NUM = C.REP\_NUM  SELECT O.ORDER\_NUM, NUM\_ORDERED, ITEM\_NUM, C.CUSTOMER\_NUM, CUSTOMER\_NAME  FROM ORDER\_LINE OL INNER JOIN ORDERS O ON OL.ORDER\_NUM = O.ORDER\_NUM  INNER JOIN CUSTOMER C ON C.CUSTOMER\_NUM = O.CUSTOMER\_NUM  INNER JOIN REP R ON R.REP\_NUM = C.REP\_NUM  WHERE CREDIT\_LIMIT = 7500  ORDER BY CUSTOMER\_NUM, ORDER\_NUM |
| **Results:** |
| **JOIN table with itself: SELF-JOIN**  **For each pair of customers located in the same city, display the customer number, customer name and city.**  **Note 1: You need to use the same table twice on the FROM clause with a different alias for each.**  **Note 2: The relationship here is not using foreign keys but similar column.**  **Note 3: Add another criteria using < condition to eliminate duplications.** |
| **SELECT STATEMENT:**  SELECT FC.CUSTOMER\_NUM, FC.CUSTOMER\_NAME, SC.CITY, SC.CUSTOMER\_NUM, SC.CUSTOMER\_NAME  FROM CUSTOMER FC, CUSTOMER SC  WHERE FC.CITY = SC.CITY  AND FC.CUSTOMER\_NUM <> SC.CUSTOMER\_NUM |
| **Results:** |
| **5-7** For each order, list the order number, order date, item number, description, and category for each item that makes up the order. |
| **5-7 SELECT STATEMENT:**  SELECT O.ORDER\_NUM, O.ORDER\_DATE, I.ITEM\_NUM, I.DESCRIPTION, I.CATEGORY  FROM ORDERS O, ORDER\_LINE OL, ITEM I  WHERE O.ORDER\_NUM = OL.ORDER\_NUM  AND |
| **5-7** **Results:** |
| **5-8** Repeat Exercise 7, but this time order the rows by category and then by order number |
| **5-8 SELECT STATEMENT:**  SELECT O.ORDER\_NUM, O.ORDER\_DATE, I.ITEM\_NUM, I.DESCRIPTION, I.CATEGORY  FROM ORDERS O, ORDER\_LINE OL, ITEM I  WHERE O.ORDER\_NUM = OL.ORDER\_NUM  AND I.ITEM\_NUM = OL.ITEM\_NUM  ORDER BY I.CATEGORY, O.ORDER\_NUM |
| **5-8 Results:** |
| **5-11** Find the number and name of each customer that currently has an order on file for a Rocking Horse. |
| **5-11** **SELECT STATEMENT:**  SELECT CUSTOMER.CUSTOMER\_NUM, CUSTOMER.CUSTOMER\_NAME  FROM ITEM, CUSTOMER, ORDER\_LINE, ORDERS  WHERE ITEM.ITEM\_NUM = ORDER\_LINE.ITEM\_NUM  AND ORDER\_LINE.ORDER\_NUM = ORDERS.ORDER\_NUM  AND ORDERS.CUSTOMER\_NUM = CUSTOMER.CUSTOMER\_NUM  AND ITEM.DESCRIPTION = 'Rocking Horse'; |
| **5-11 Results:** |
| **5-12** List the item number, description and category for each pair of items that are in the same category. (For example, one such pair would be item CD33 and DL51, because the category for both items is TOY.) |
| **5-12** **SELECT STATEMENT:**    **SELECT A.ITEM\_NUM, A.DESCRIPTION, B.DESCRIPTION**  **FROM ITEM A, ITEM B**  **WHERE A.CATEGORY = B.CATEGORY**  **AND A.ITEM\_NUM > B.ITEM\_NUM** |
| **5-12 Results:** |
| **5-13.** List the order number and order date for each order placed by the customer named Johnson’s Department store.  Note: To use an apostrophe within a character data value, type two single apostrophes to represent one apostrophe since apostrophes are used to surround character data. |
| **5-13** **SELECT STATEMENT:**  **SELECT ORDER\_NUM,ORDER\_DATE**  **FROM CUSTOMER, ORDERS**  **WHERE ORDERS.CUSTOMER\_NUM = CUSTOMER.CUSTOMER\_NUM**  **AND CUSTOMER\_NAME = 'Johnson''s Department Store';** |
| **5-13 Results:** |
| **5-14** List the order number and order date for each order that contains an order line for a fire engine. |
| **5-14** **SELECT STATEMENT:**  SELECT ORDER.ORDER\_NUM, ORDER.ORDER\_DATE  FROM ITEM, ORDER\_LINE, ORDER  WHERE ORDER\_LINE.ORDER\_NUM = ORDERS.ORDER\_NUM  AND ITEM.ITEM\_NUM = ORDER\_LINE.ITEM\_NUM  AND ITEM.DESCRIPTION = 'Fire Engine' |
| **5-14 Results:** |
| **INNER JOIN.** Do one of the TAL Distributor Exercises 7, 8, 11, 12, 13, 14 as an INNER JOIN |
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| **INNER JOIN.** **SELECT STATEMENT:** |
| **INNER JOIN.** **Results:** |