Case Study 2 of 3: SQL with Pine Valley Furniture Company Database
Business Intelligence and Analytics

Your assignment is to write and execute the SQL queries that will produce the data (record sets) requested below using the Pine Valley Furniture database in Microsoft Access and Teradata SQL Assistant. **Please print out a copy of the Pine Valley Furniture Database Description document for reference purposes as you work on this assignment.** Use Microsoft Access. After you are able to run your SQL statement and get the desired result, copy your

(1) SQL statement (as text), and
(2) the Recordset (your output/results) from each SQL statement

When you have finished, please submit this Word document (including your SQL statements and output) in BBLearn**.** You may want to use the "Snipping Tool" to copy the recordset (output).

1. List customer ID, customer name, order ID, and order date, for all customers who have placed orders.

Hint: You need to include 2 tables in your FROM clause and you will need 1 JOIN

```
SELECT
customer_t.customer_id, customer_name, order_id, order_date
FROM
Customer_t, Order_t
WHERE
Customer_t.Customer_ID = Order_t.Customer_ID
;
```

Customer_	Customer_Name	order_id	order_date
1	Contemporary Casuals	1001	10/21/2008
1	Contemporary Casuals	1010	11/5/2008
2	Value Furniture	1006	10/24/2008
3	Home Furnishings	1005	10/24/2008
4	Eastern Furniture	1009	11/5/2008
5	Impressions	1004	10/22/2008
8	Calfornia Classics	1002	10/21/2008
11	American Euro Lifestyles	1007	10/27/2008
12	Battle Creek Furniture	1008	10/30/2008
15	Mountain Scenes	1003	10/22/2008

2. List customer ID, customer name, order ID, order date, product ID and the quantity of each product ordered, for all customers who have placed orders.

   Hint: You need to include 3 tables in your FROM clause and you will need 2 JOINS

```
SELECT
customer_t.customer_id, customer_name, Order_t.order_id, order_date, product_id,
ordered_quantity
FROM
Customer_t, Order_t, Order_line_t
WHERE
Customer_t.Customer_ID = Order_t.Customer_ID
AND
Order_t.Order_id = Order_line_t.Order_id
ORDER BY
customer_t.customer_id
;
```

Customer_	Customer_Name	order_id	order_date	product_id	ordered_qua
1	Contemporary Casuals	1001	10/21/2008	2	2
1	Contemporary Casuals	1001	10/21/2008	4	1
1	Contemporary Casuals	1001	10/21/2008	1	2
1	Contemporary Casuals	1010	11/5/2008	8	10
2	Value Furniture	1006	10/24/2008	5	2
2	Value Furniture	1006	10/24/2008	4	1
2	Value Furniture	1006	10/24/2008	7	2
3	Home Furnishings	1005	10/24/2008	4	4
4	Eastern Furniture	1009	11/5/2008	4	2
4	Eastern Furniture	1009	11/5/2008	7	3
5	Impressions	1004	10/22/2008	8	2
5	Impressions	1004	10/22/2008	6	2
8	Calfornia Classics	1002	10/21/2008	3	5
11	American Euro Lifestyles	1007	10/27/2008	1	3
11	American Euro Lifestyles	1007	10/27/2008	2	2
12	Battle Creek Furniture	1008	10/30/2008	3	3
12	Battle Creek Furniture	1008	10/30/2008	8	3
15	Mountain Scenes	1003	10/22/2008	3	3

3. List customer ID, customer name, order ID, order date, product name, quantity ordered, and price of each product, for all customers who have placed orders.

   Hint: You need to include 4 tables in your FROM clause and you will need 3 JOINS

```
SELECT
Customer_t.customer_id, customer_name, Order_t.order_id, order_date,
product_description, ordered_quantity, standard_price
FROM
Customer_t, Order_t, Order_line_t, Product_t
WHERE
Customer_t.Customer_ID = Order_t.Customer_ID
AND
Order_t.Order_id = Order_line_t.Order_id
AND
Order_line_t.Product_id = Product_t.Product_id
ORDER BY
customer_t.customer_id
;
```

Customer_	Customer_Name	order_id	order_date	Product_Descriptio	ordered_qua	Standard_Price
1	Contemporary Casuals	1001	10/21/2008	Coffee Table	2	$200.00
1	Contemporary Casuals	1001	10/21/2008	Entertainment Center	1	$650.00
1	Contemporary Casuals	1001	10/21/2008	End Table	2	$175.00
1	Contemporary Casuals	1010	11/5/2008	Computer Desk	10	$250.00
2	Value Furniture	1006	10/24/2008	Writers Desk	2	$325.00
2	Value Furniture	1006	10/24/2008	Entertainment Center	1	$650.00
2	Value Furniture	1006	10/24/2008	Dining Table	2	$800.00
3	Home Furnishings	1005	10/24/2008	Entertainment Center	4	$650.00
4	Eastern Furniture	1009	11/5/2008	Entertainment Center	2	$650.00
4	Eastern Furniture	1009	11/5/2008	Dining Table	3	$800.00
5	Impressions	1004	10/22/2008	Computer Desk	2	$250.00
5	Impressions	1004	10/22/2008	8-Drawer Desk	2	$750.00
8	Calfornia Classics	1002	10/21/2008	Computer Desk	5	$375.00
11	American Euro Lifestyles	1007	10/27/2008	End Table	3	$175.00
11	American Euro Lifestyles	1007	10/27/2008	Coffee Table	2	$200.00
12	Battle Creek Furniture	1008	10/30/2008	Computer Desk	3	$375.00
12	Battle Creek Furniture	1008	10/30/2008	Computer Desk	3	$250.00
15	Mountain Scenes	1003	10/22/2008	Computer Desk	3	$375.00

4. List the customer name, city, and state of customers who ordered products 3 or 4.

   Hint: You need to include 3 tables in your FROM clause and you will need 2 JOINS

```
SELECT
Customer_name, Customer_city, Customer_state
FROM
Customer_t, Order_t, Order_line_t
WHERE
Customer_t.Customer_ID = Order_t.Customer_ID
AND
Order_t.Order_id = Order_line_t.Order_id
AND
Order_line_t.product_id IN
(3,4)
;
```

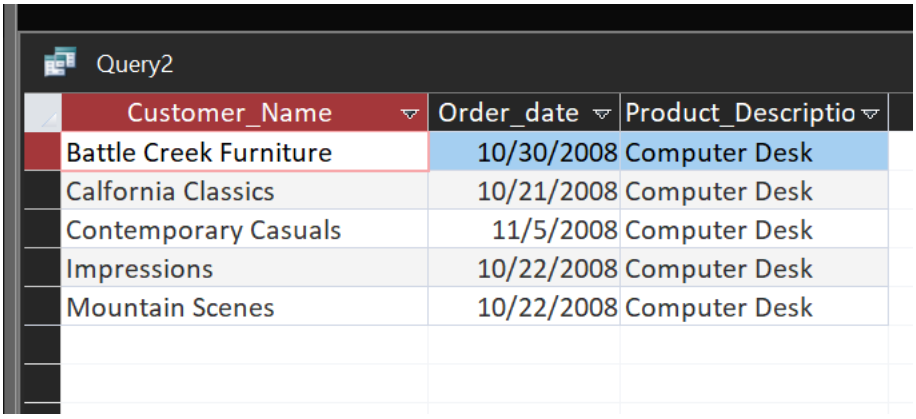
Customer_Name	City	Stat
Contemporary Casuals	Gainesville	FL
Calfornia Classics	Santa Clara	CA
Mountain Scenes	Ogden	UT
Home Furnishings	Albany	NY
Value Furniture	Plano	TX
Battle Creek Furniture	Battle Creek	MI
Eastern Furniture	Carteret	NJ

5. List the customer name, order date, and product description for those customers who have purchased a Computer Desk.

   Hint: You need to include 4 tables in your FROM clause and you will need 3 JOINs

SELECT

```
Distinct Customer_name, Order_date, Product_description

FROM

Customer_t, Order_t, Order_line_t, Product_t

WHERE

Customer_t.Customer_ID = Order_t.Customer_ID

AND

Order_t.Order_id = Order_line_t.Order_id

AND

Order_line_t.Product_id = Product_t.Product_id

AND

Product_description='Computer Desk'

;
```



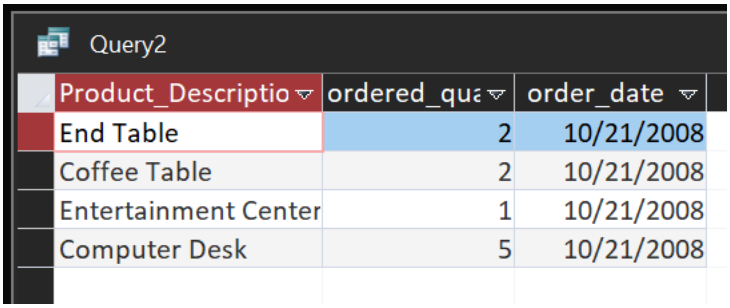
Query2

Customer_Name	Order_date	Product_Descriptio
Battle Creek Furniture	10/30/2008	Computer Desk
Calfornia Classics	10/21/2008	Computer Desk
Contemporary Casuals	11/5/2008	Computer Desk
Impressions	10/22/2008	Computer Desk
Mountain Scenes	10/22/2008	Computer Desk

6. Which products were ordered before 10/22/2008? List the product name, the quantity ordered, and the order date for all orders placed before 10/22/2008.

Hint: Remember to use # sign as a delimiter for the date (order_date < #10/22/2008#).

```
SELECT
product_description, ordered_quantity, order_date
FROM
Product_t, Order_t, Order_line_t
WHERE
Order_t.Order_id = Order_line_t.Order_id
AND
Order_line_t.Product_id = Product_t.Product_id
AND
order_date<#10/22/2008#
;
```

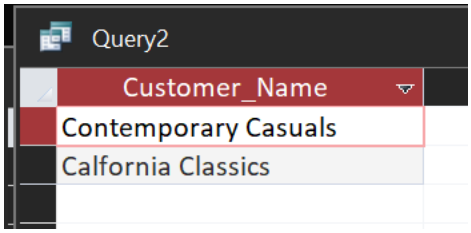


Query2

Product_Descriptio	ordered_qua	order_date
End Table	2	10/21/2008
Coffee Table	2	10/21/2008
Entertainment Center	1	10/21/2008
Computer Desk	5	10/21/2008

7. Write a query that will list the customer_name for orders that were placed before 10/22/2008.

```
SELECT
Customer_name
FROM
Customer_t, Order_t
WHERE
Customer_t.Customer_ID = Order_t.Customer_ID
AND
order_date<#10/22/2008#
;
```



Query2

Customer_Name
Contemporary Casuals
Calfornia Classics

8. **Extra Credit (worth 1 pt)** Now write a nested query that will list the customer_name for orders that were placed before 10/22/2008.

Hint: Your inner query should retrieve customer_ID from the order_t table and your outer query should retrieve customer_name from the customer_t table. Use the IN command in the WHERE clause of your outer query. See the class slides for an example.

```
SELECT
Customer_Name
FROM
Customer_t
WHERE
Customer_ID IN
(SELECT
Customer_ID
FROM Order_t
WHERE order_date<#10/22/2008#)
;
```