

Case Study 2 of 3: SQL with Pine Valley Furniture Company Database

Business Intelligence and Analytics

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

```
SELECT C.customer_ID,  
C.customer_Name,  
O.order_ID,  
O.order_Date  
FROM customer_t C, order_t O
```

```
WHERE C.customer_ID = O.customer_ID;
```

Customer_ID ▾	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	California 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
* (New)			

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.

```
SELECT  
C.Customer_ID,C.Customer_Name,O.Order_ID,O.Order_Date,OL.Product_ID,OL.Ordered_Quantity  
FROM  
CUSTOMER_t C, ORDER_t O, ORDER_line_t OL  
WHERE C.Customer_ID=O.Customer_ID  
AND  
O.Order_ID=OL.Order_ID;
```

Customer_ID	Customer_Name	Order_ID	Order_Date	Product_ID	Ordered_Quantity
1	Contemporary Casuals	1001	10/21/2008	1	2
1	Contemporary Casuals	1001	10/21/2008	2	2
1	Contemporary Casuals	1001	10/21/2008	4	1
8	California Classics	1002	10/21/2008	3	5
15	Mountain Scenes	1003	10/22/2008	3	3
5	Impressions	1004	10/22/2008	6	2
5	Impressions	1004	10/22/2008	8	2
3	Home Furnishings	1005	10/24/2008	4	4
2	Value Furniture	1006	10/24/2008	4	1
2	Value Furniture	1006	10/24/2008	5	2
2	Value Furniture	1006	10/24/2008	7	2
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
4	Eastern Furniture	1009	11/5/2008	4	2
4	Eastern Furniture	1009	11/5/2008	7	3
1	Contemporary Casuals	1010	11/5/2008	8	10

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.

SELECT

C.Customer_ID,C.Customer_Name,O.Order_ID,O.Order_Date,P.Product_Description,Ordered_Quantity,Standard_Price

FROM

Customer_t C, Order_t O, Order_line_t OL, Product_t P

WHERE

O.order_id=OL.order_id

AND

OL.product_ID=P.product_ID

AND

C.customer_id=O.customer_id;

Customer_ID	Customer_Name	Order_ID	Order_Date	Product_Description	Ordered_Quantity	Standard_Price
1	Contemporary Casuals	1001	10/21/2008	End Table	2	\$175.00
1	Contemporary Casuals	1001	10/21/2008	Coffee Table	2	\$200.00
1	Contemporary Casuals	1001	10/21/2008	Entertainment Center	1	\$650.00
8	California Classics	1002	10/21/2008	Computer Desk	5	\$375.00
15	Mountain Scenes	1003	10/22/2008	Computer Desk	3	\$375.00
5	Impressions	1004	10/22/2008	8-Drawer Desk	2	\$750.00
5	Impressions	1004	10/22/2008	Computer Desk	2	\$250.00
3	Home Furnishings	1005	10/24/2008	Entertainment Center	4	\$650.00
2	Value Furniture	1006	10/24/2008	Entertainment Center	1	\$650.00
2	Value Furniture	1006	10/24/2008	Writers Desk	2	\$325.00
2	Value Furniture	1006	10/24/2008	Dining Table	2	\$800.00
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
4	Eastern Furniture	1009	11/5/2008	Entertainment Center	2	\$650.00
4	Eastern Furniture	1009	11/5/2008	Dining Table	3	\$800.00
1	Contemporary Casuals	1010	11/5/2008	Computer Desk	10	\$250.00

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

```

SELECT
C.Customer_name, C.Customer_city, C.Customer_state

FROM
Customer_t C, Order_t O, Order_line_t OL, Product_t P
WHERE
O.order_id=OL.order_id
AND
OL.product_id=P.product_id
AND
C.customer_id=O.customer_id
AND
(P.Product_id=3

OR
P.Product_id=4);

```

Customer_Name ▼	City ▼	Stat ▼	
Contemporary Casuals	Gainesville	FL	
California 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.

```

SELECT
C.Customer_name, O.order_date,P.product_description
FROM
Order_t O, order_line_t OL, product_t P, Customer_t C

WHERE
C.customer_ID=O.customer_ID
AND
O.order_ID=OL.order_ID
AND
OL.product_ID=P.product_ID
AND
P.product_description = "computer desk";

```

Customer_Name ▼	order_date ▼	Product_Description ▼	
California Classics	10/21/2008	Computer Desk	
Mountain Scenes	10/22/2008	Computer Desk	
Impressions	10/22/2008	Computer Desk	
Battle Creek Furniture	10/30/2008	Computer Desk	
Battle Creek Furniture	10/30/2008	Computer Desk	
Contemporary Casuals	11/5/2008	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.

Products were ordered before 10/22/2008

```

SELECT
Product_description, ordered_Quantity, order_date
FROM
Order_t O, Order_line_t OL ,Product_t P

WHERE
P.product_id=OL.product_id
AND
OL.order_id=O.order_id

AND
Order_date < #10/22/2008# ;

```

Product_Description ▾
End Table
Coffee Table
Entertainment Center
Computer Desk

List the product name, the quantity ordered, and the order date for all orders placed before 10/22/2008

Product_Description ▾	ordered_Quantity ▾	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 C, Order_t O
WHERE
C.Customer_ID=O.Customer_ID
AND
ORDER_date<#10/22/2008#;
```

Customer_Name
Contemporary Casuals
California 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.

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

Customer_Name
Contemporary Casuals
California Classics
*

Thanks!