Case Study: SQL 2

Please copy your **(1) SQL statement (as text), and (2) the result table (as image, screen prints of your output/results from DB Browser for SQLite)** from each SQL statement below:

1. Retrieve customer name, orderid, and order date for customers who have placed orders.

   SELECT customername,orderid,orderdate
   FROM customer c, order_t ot
   WHERE c.customerid=ot.customerid;

	customername	orderid	orderdate
1	Contemporary Casuals	1001	2022-10-10
2	California Classics	1002	2022-10-12
3	Mountain Scenes	1003	2022-10-14
4	Impressions	1004	2022-10-16
5	Home Furnishings	1005	2022-10-18
6	Value Furnitures	1006	2022-10-20
7	American Euro Lifestyles	1007	2022-11-10
8	Battle Creek Furniture	1008	2022-11-12
9	Eastern Furniture	1009	2022-11-14
10	Contemporary Casuals	1010	2022-11-16

2. For each line item of an order, list the orderid, order date, description of the product that was sold, amount charged, customerid and name of the customer who placed the order.

   SELECT ol.orderid,ot.orderdate,p.productdescription,(ol.quantity*p.productprice) as Alias,c.customerid,c.customername
   FROM customer c, product p, orderline ol, order_t ot
   WHERE ol.orderid=ot.orderid AND ol.productid=p.productid AND ot.customerid=c.customerid;

	orderid	orderdate	productdescription	Alias	customerid	customername
1	1001	2022-10-10	End Table	350	1	Contemporary Casuals
2	1001	2022-10-10	Coffee Table	400	1	Contemporary Casuals
3	1001	2022-10-10	Entertainment	2600	1	Contemporary Casuals
4	1002	2022-10-12	Computer Desk	1875	8	California Classics
5	1003	2022-10-14	Computer Desk	3000	15	Mountain Scenes
6	1004	2022-10-16	8-Drawer Desk	1500	5	Impressions
7	1004	2022-10-16	Computer Desk	500	5	Impressions
8	1005	2022-10-18	Computer Desk	1000	3	Home Furnishings
9	1006	2022-10-20	Entertainment	650	2	Value Furnitures
10	1006	2022-10-20	Writers Desk	2925	2	Value Furnitures
11	1006	2022-10-20	Dining Table	1600	2	Value Furnitures
12	1007	2022-11-10	End Table	525	11	American Euro Lifestyles
13	1007	2022-11-10	Coffee Table	1800	11	American Euro Lifestyles
14	1008	2022-11-12	Computer Desk	1125	12	Battle Creek Furniture
15	1008	2022-11-12	Computer Desk	1750	12	Battle Creek Furniture
16	1009	2022-11-14	Entertainment	1300	4	Eastern Furniture
17	1009	2022-11-14	Dining Table	2400	4	Eastern Furniture
18	1010	2022-11-16	Computer Desk	2500	1	Contemporary Casuals

3. For each order, list the orderid, the total amount and the total units on that order.

SELECT ol.orderid,sum(ol.quantity) AS TotalUnits, sum(ol.quantity*p.productprice) AS TotalAmount
FROM orderline ol,product p
WHERE ol.productid=p.productid
GROUP by ol.orderid;

	orderid	TotalUnits	TotalAmount
1	1001	8	3350
2	1002	5	1875
3	1003	8	3000
4	1004	4	2000
5	1005	4	1000
6	1006	12	5175
7	1007	12	2325
8	1008	10	2875
9	1009	5	3700
10	1010	10	2500

4. Consider each group contains the products that have the same product description with the same product finish. For each group, list the product description, product finish, and the total units ordered.

SELECT p.productdescription,p.productfinish,sum(ol.quantity) AS TotalUnits
FROM orderline ol,product p
WHERE ol.productid=p.productid
GROUP by p.productdescription,p.productfinish;

	productdescription	productfinish	TotalUnits
1	8-Drawer Desk	Cherry	2
2	Coffee Table	Natural Ash	11
3	Computer Desk	Cherry	23
4	Computer Desk	Natural Ash	16
5	Dining Table	Natural Ash	5
6	End Table	Cherry	5
7	Entertainment	Natural Ash	7
8	Writers Desk	Cherry	9

5. Which product lines have (include) two or more products?

SELECT pl.productlinename,count(p.productlineid) AS NoofProducts
FROM product p, productline pl
WHERE pl.productlineid=p.productlineid
GROUP BY pl.productlinename
HAVING COUNT(p.productlineid)>=2;

	productlinename	NoofProducts
1	Cherry Tree	2
2	Country Look	2
3	Scandinavia	4

6. Write a query that will retrieve customer ID, customer name, and order date, and that will display customer data even if the customer has not placed an order.

SELECT c.customerid,c.customername,ot.orderdate
FROM customer c
LEFT OUTER JOIN order_t ot on c.customerid=ot.customerid;

	customerid	customername	orderdate
1	1	Contemporary Casuals	2022-10-10
2	1	Contemporary Casuals	2022-11-16
3	2	Value Furnitures	2022-10-20
4	3	Home Furnishings	2022-10-18
5	4	Eastern Furniture	2022-11-14
6	5	Impressions	2022-10-16
7	6	Furniture Gallery	NULL
8	7	Period Furniture	NULL
9	8	California Classics	2022-10-12
10	9	M and H Casual Furniture	NULL
11	10	Seminole Interiors	NULL
12	11	American Euro Lifestyles	2022-11-10
13	12	Battle Creek Furniture	2022-11-12
14	13	Heritage Furnishings	NULL
15	14	Kaneohe Homes	NULL
16	15	Mountain Scenes	2022-10-14

7. Write a query that will retrieve the productid, product description, and product price for each product whose price is greater than the average price of all products.

SELECT productid,productdescription,productprice
FROM product
WHERE productprice>(SELECT AVG(productprice)
                    FROM product);

	productid	productdescription	productprice
1	4	Entertainment	650
2	6	8-Drawer Desk	750
3	7	Dining Table	800

8. Now write a query that will list the customer name for orders that were placed before 2022-11-09.

SELECT customername
FROM customer
WHERE customerid IN(
        SELECT customerid
        FROM order_t
        WHERE orderdate < '2022-11-09');

	customername
1	Contemporary Casuals
2	Value Furnitures
3	Home Furnishings
4	Impressions
5	California Classics
6	Mountain Scenes