WoodCraftShoals SQL Complicated Joins

This project was from my Computer Information Systems class. This project was based on handcrafted wood tables. We had to input customers and their information, make shipping costs, tax, their order, and the quantity. We had to put it all together on an invoice with the subtotal, the tax, the shipping, and the total altogether.

```
karlaahildebrand@dbserver:~$ sudo mysql -u root
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.32-0ubuntu0.20.04.2 (Ubuntu)

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| PetTaxi            |
| ShoalsWoodcraft    |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
6 rows in set (0.00 sec)

mysql> use ShoalsWoodcraft;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+---------------------------+
| Tables_in_ShoalsWoodcraft |
+---------------------------+
| Customer                  |
| Orders                    |
```

```
| PO                |
| Product           |
| Tax               |
| invoice           |
+-------------------------+
6 rows in set (0.01 sec)

mysql> describe Customer;
+------------+-------------+------+-----+---------+----------------+
| Field      | Type        | Null | Key | Default | Extra          |
+------------+-------------+------+-----+---------+----------------+
| CustomerId | int         | NO   | PRI | NULL    | auto_increment |
| Fname      | varchar(20) | YES  |     | NULL    |                |
| Lname      | varchar(20) | YES  |     | NULL    |                |
| Address    | varchar(40) | YES  |     | NULL    |                |
| Zipcode    | int         | YES  |     | NULL    |                |
| State      | varchar(2)  | YES  |     | NULL    |                |
| City       | varchar(20) | YES  |     | NULL    |                |
+------------+-------------+------+-----+---------+----------------+
7 rows in set (0.00 sec)

mysql> select * from Customers;
ERROR 1146 (42S02): Table 'ShoalsWoodcraft.Customers' doesn't exist
mysql> select * from Customer;
+------------+-------+------------+-----------------+---------+-------+------------+
| CustomerId | Fname | Lname      | Address         | Zipcode | State | City       |
+------------+-------+------------+-----------------+---------+-------+------------+
|          1 | Karla | Hildebrand | UNA box 5972    |   35632 | AL    | Florence   |
|          2 | Kim   | Kardashian | 123 Main Street |   91301 | CA    | Calabassas |
|          3 | Elon  | Musk       | 123 Bel Air Road|   91301 | CA    | Bel Air    |
+------------+-------+------------+-----------------+---------+-------+------------+
3 rows in set (0.01 sec)

mysql> describe Orders;
+------------+---------------+------+-----+---------+----------------+
| Field      | Type          | Null | Key | Default | Extra          |
+------------+---------------+------+-----+---------+----------------+
| OrderId    | int           | NO   | PRI | NULL    | auto_increment |
| Date       | date          | YES  |     | NULL    |                |
| TaxID      | int           | YES  | MUL | NULL    |                |
| Shipping   | decimal(10,2) | YES  |     | NULL    |                |
| CustomerID | int           | YES  | MUL | NULL    |                |
+------------+---------------+------+-----+---------+----------------+
5 rows in set (0.00 sec)
```

```
mysql> select * from Orders;
+---------+------------+-------+----------+------------+
| OrderId | Date       | TaxID | Shipping | CustomerID |
+---------+------------+-------+----------+------------+
|       1 | 2015-05-03 |     1 |   475.34 |          2 |
+---------+------------+-------+----------+------------+
1 row in set (0.01 sec)

mysql> describe PO;
+-----------+------+------+-----+---------+-------+
| Field     | Type | Null | Key | Default | Extra |
+-----------+------+------+-----+---------+-------+
| ProductId | int  | YES  | MUL | NULL    |       |
| Orderid   | int  | YES  | MUL | NULL    |       |
| Quant     | int  | YES  |     | NULL    |       |
+-----------+------+------+-----+---------+-------+
3 rows in set (0.01 sec)

mysql> select * from PO;
+-----------+---------+-------+
| ProductId | Orderid | Quant |
+-----------+---------+-------+
|         1 |       1 |     1 |
+-----------+---------+-------+
1 row in set (0.00 sec)

mysql> describe Product;
+-----------+---------------+------+-----+---------+----------------+
| Field     | Type          | Null | Key | Default | Extra          |
+-----------+---------------+------+-----+---------+----------------+
| ProductId | int           | NO   | PRI | NULL    | auto_increment |
| size      | varchar(20)   | YES  |     | NULL    |                |
| price     | decimal(10,2) | YES  |     | NULL    |                |
+-----------+---------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)

mysql> select * from Product;
+-----------+-------+----------+
| ProductId | size  | price    |
+-----------+-------+----------+
|         1 | Large | 20000.00 |
+-----------+-------+----------+
1 row in set (0.01 sec)
```

```
mysql> describe Tax;
+-------+--------------+------+-----+---------+----------------+
| Field | Type         | Null | Key | Default | Extra          |
+-------+--------------+------+-----+---------+----------------+
| Taxid | int          | NO   | PRI | NULL    | auto_increment |
| rate  | decimal(10,2)| YES  |     | NULL    |                |
+-------+--------------+------+-----+---------+----------------+
2 rows in set (0.01 sec)

mysql> select * from Tax;
+-------+------+
| Taxid | rate |
+-------+------+
|     1 | 0.09 |
+-------+------+
1 row in set (0.01 sec)

mysql> describe invoice;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| CustomerId | int          | NO   |     | 0       |       |
| Fname      | varchar(20)  | YES  |     | NULL    |       |
| Lname      | varchar(20)  | YES  |     | NULL    |       |
| Address    | varchar(40)  | YES  |     | NULL    |       |
| City       | varchar(20)  | YES  |     | NULL    |       |
| State      | varchar(2)   | YES  |     | NULL    |       |
| Zipcode    | int          | YES  |     | NULL    |       |
| OrderId    | int          | NO   |     | 0       |       |
| Date       | date         | YES  |     | NULL    |       |
| Shipping   | decimal(10,2)| YES  |     | NULL    |       |
| Tax_Rate   | decimal(10,2)| YES  |     | NULL    |       |
| ProductId  | int          | NO   |     | 0       |       |
| size       | varchar(20)  | YES  |     | NULL    |       |
| price      | decimal(10,2)| YES  |     | NULL    |       |
| Quant      | int          | YES  |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
15 rows in set (0.00 sec)

mysql> select * from invoice;
+------------+-------+------------+----------------+------------+-------+---------+---------+------------+----------+-
---------+-----------+-------+----------+-------+
```

CustomerId	Fname	Lname	Address	City	State	Zipcode	OrderId	Date	Shipping	Tax_Rate	ProductId	size	price	Quant
2	Kim	Kardashian	123 Main Street	Calabassas	CA	91301	1	2015-05-03	475.34	0.09	1	Large	20000.00	1

1 row in set (0.01 sec)