For this assignment, write queries using SQL to acquire data about customers, vendors, products, and employees in a fictitious sales database. These queries will cover many of the core aspects of writing SQL to produce data for reporting and analyzing information. There may be multiple ways to produce the same results, but ensure you are returning the requested fields.

Using the Sales Orders database, complete the queries below.

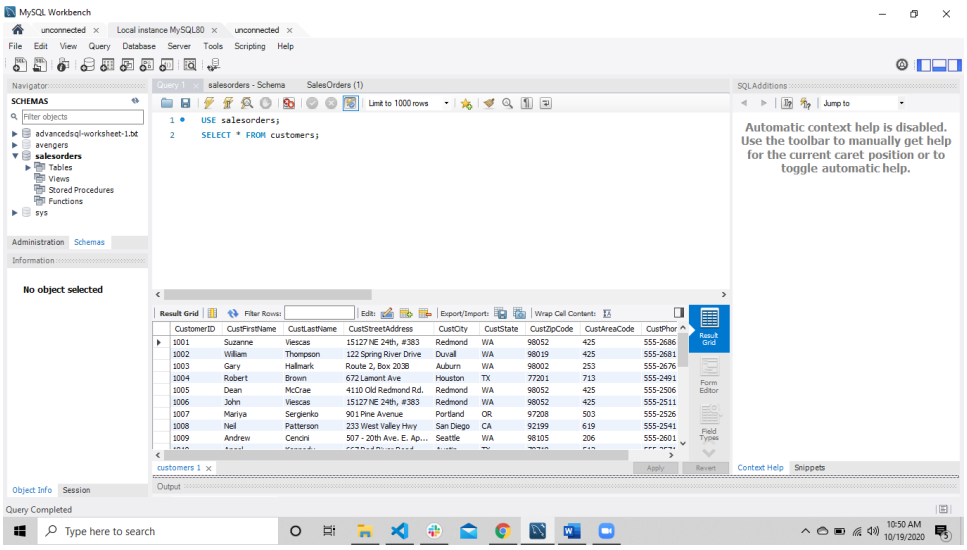
1. Show all the information on our customers.

a) Query: SELECT * FROM customers;

b) Columns: 9 Columns

c) Expected Row Count: 28 Rows

d) Screenshot:



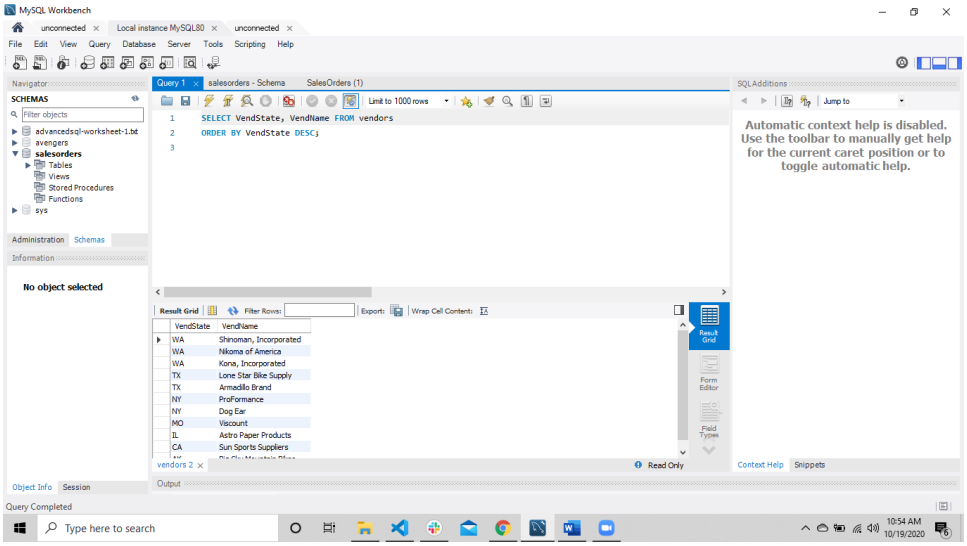
2. Show a list of states, in reverse alphabetical order, where our vendors are located, and include the names of the vendor.

a) Query: SELECT VendState, VendName FROM vendors
ORDER BY VendState DESC;

b) Columns: 2 Columns

c) Expected Row Count: 11 Rows

d) Screenshot:



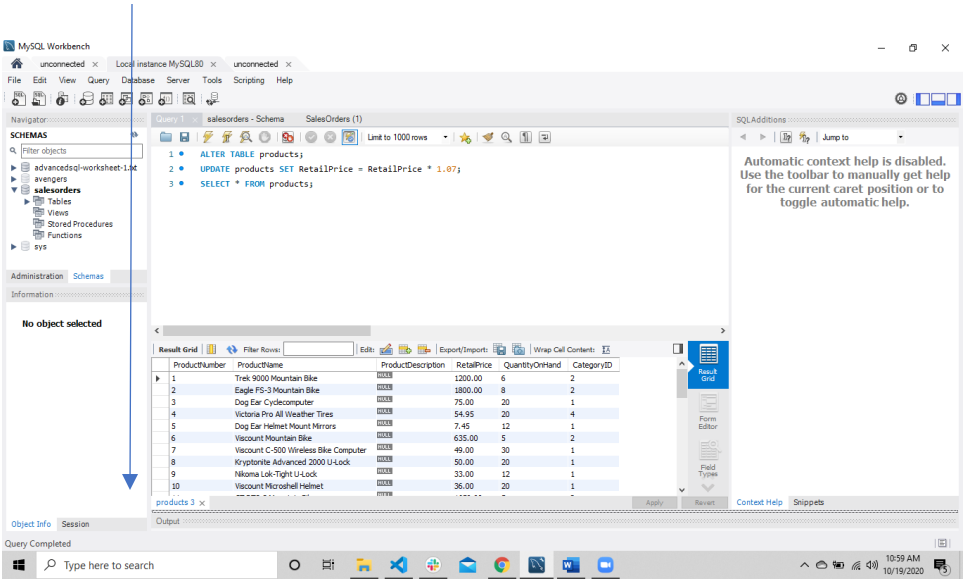
3. **What if we adjusted the retail price of each product by increasing it 7 percent?**

   a) Query: ALTER TABLE products;
   UPDATE products SET RetailPrice = RetailPrice * 1.07;
   SELECT * FROM products;

   b) Columns: 6 Columns

   c) Expected Row Count: 40 Rows

   d) Screenshot:



4. **Show a list of orders made by each customer in ascending date order.**

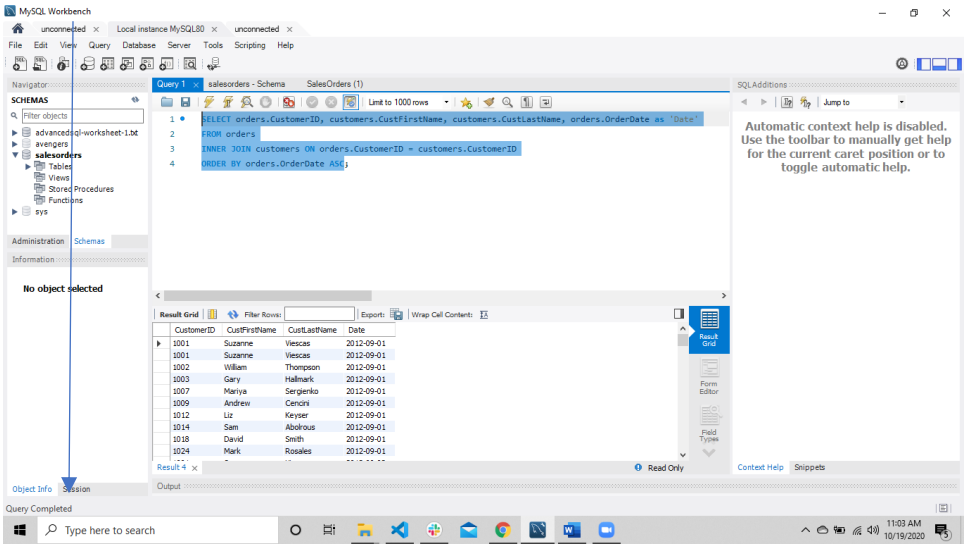
   a) Query: SELECT orders.CustomerID, customers.CustFirstName,
   customers.CustLastName, orders.OrderDate as 'Date'
   FROM orders

```
INNER JOIN customers ON orders.CustomerID = customers.CustomerID
ORDER BY orders.OrderDate ASC;
```

b) Columns: 4 Columns

c) Expected Row Count: 944 Rows

d) Screenshot:



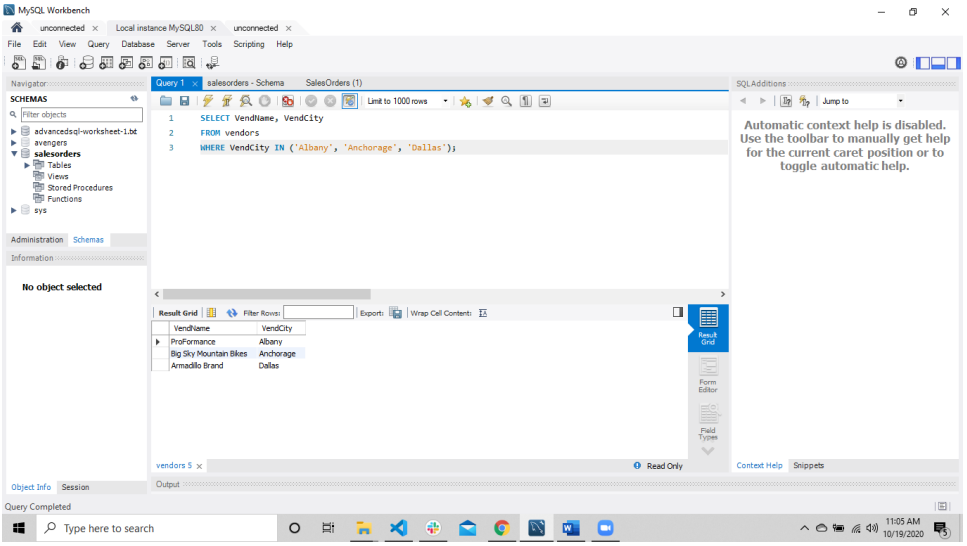
5. Give the names of all vendors based in Albany, Anchorage, and Dallas.

a) Query:
```
SELECT VendName, VendCity
FROM vendors
WHERE VendCity IN ('Albany', 'Anchorage', 'Dallas');
```

b) Columns: 2

c) Expected Row Count: 3 Rows

d) Screenshot:



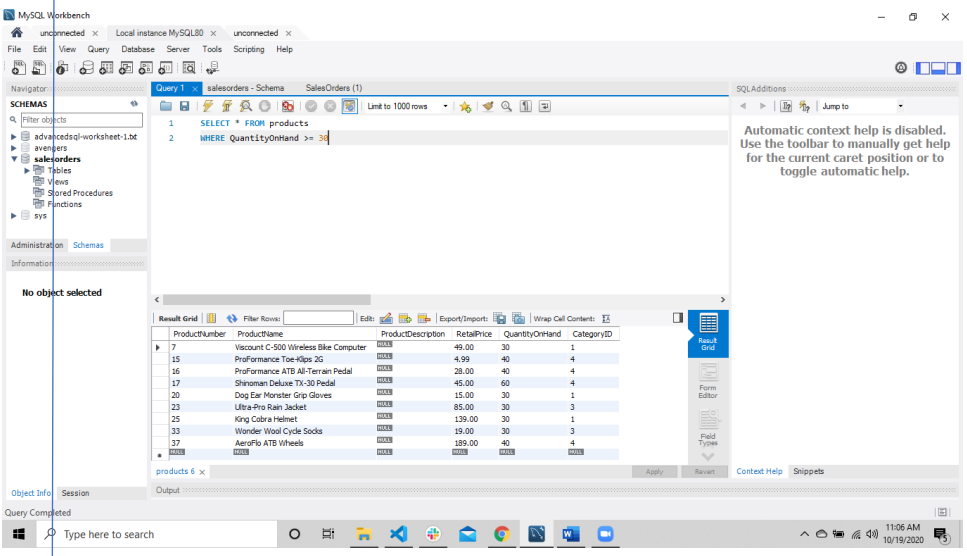
6. **Show an alphabetized list of products with a quantity on hand greater than or equal to 30.**

   a) Query:
   ```
   SELECT * FROM products
   WHERE QuantityOnHand >= 30;
   ```

   b) Columns: 6 Columns

   c) Expected Row Count: 9 Rows

   d) Screenshot:



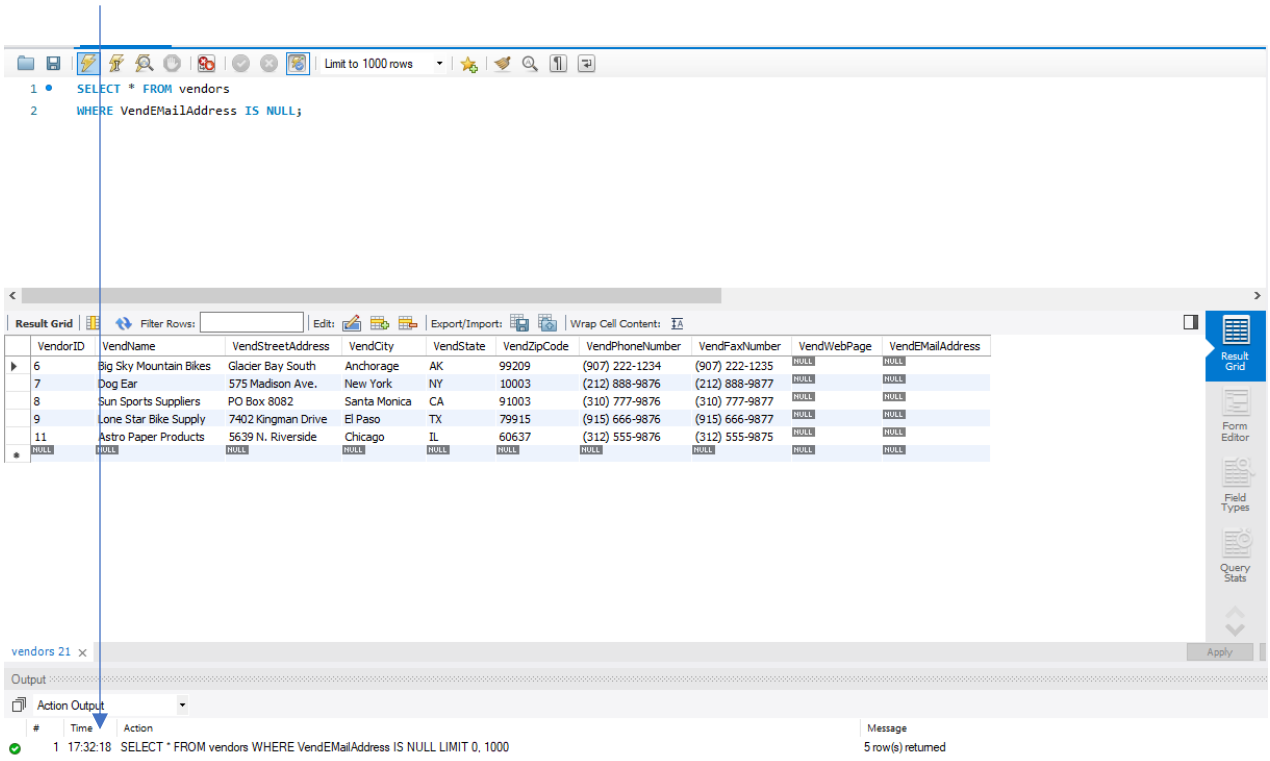
7. **What vendors do we work with that don't have an email address?**

   a) Query:
   ```
   SELECT * FROM vendors
   WHERE VendEMailAddress IS NULL;
   ```

b) Columns: 10 Columns

c) Expected Row Count: 5 Rows

d) Screenshot:



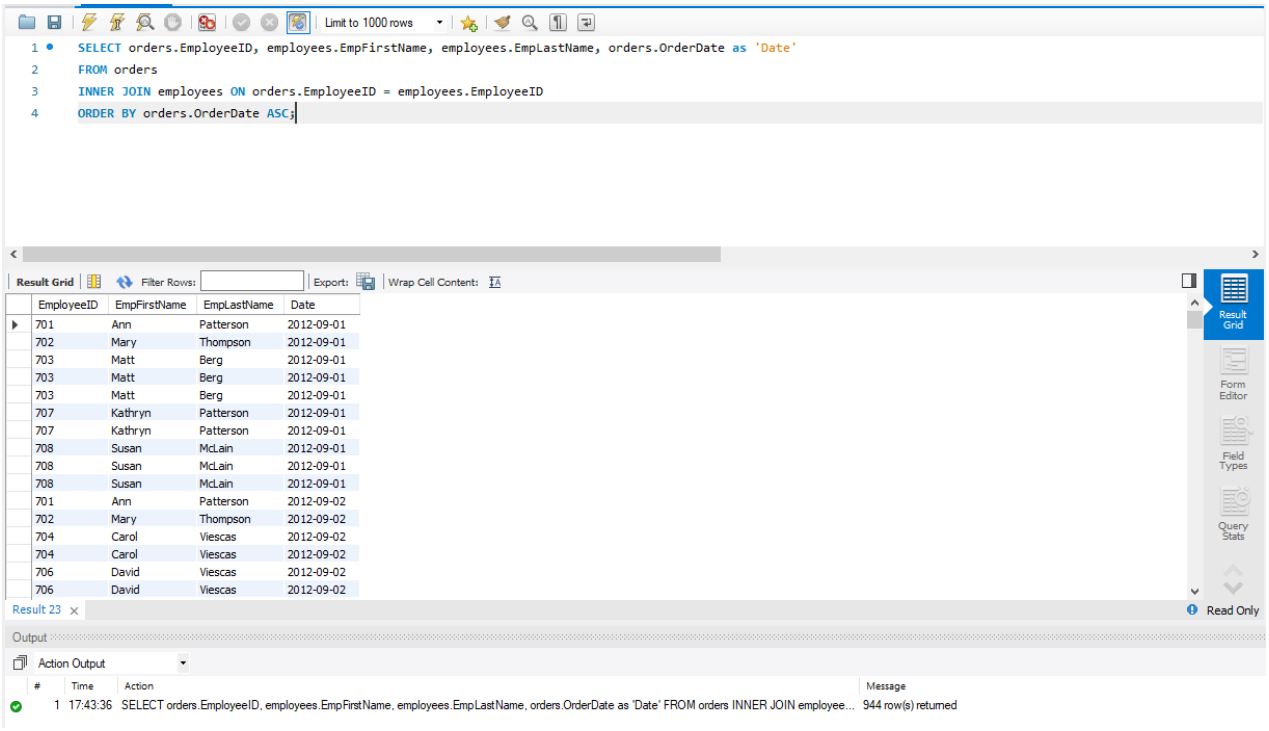
8. List employees and the dates their orders shipped sorted by order date.

a) Query: SELECT orders.EmployeeID, employees.EmpFirstName, employees.EmpLastName, orders.OrderDate as 'Date'
FROM orders
INNER JOIN employees ON orders.EmployeeID = employees.EmployeeID
ORDER BY orders.OrderDate ASC;

b) Columns: 4 Columns

c) Expected Row Count: 944 Rows

d) Screenshot:



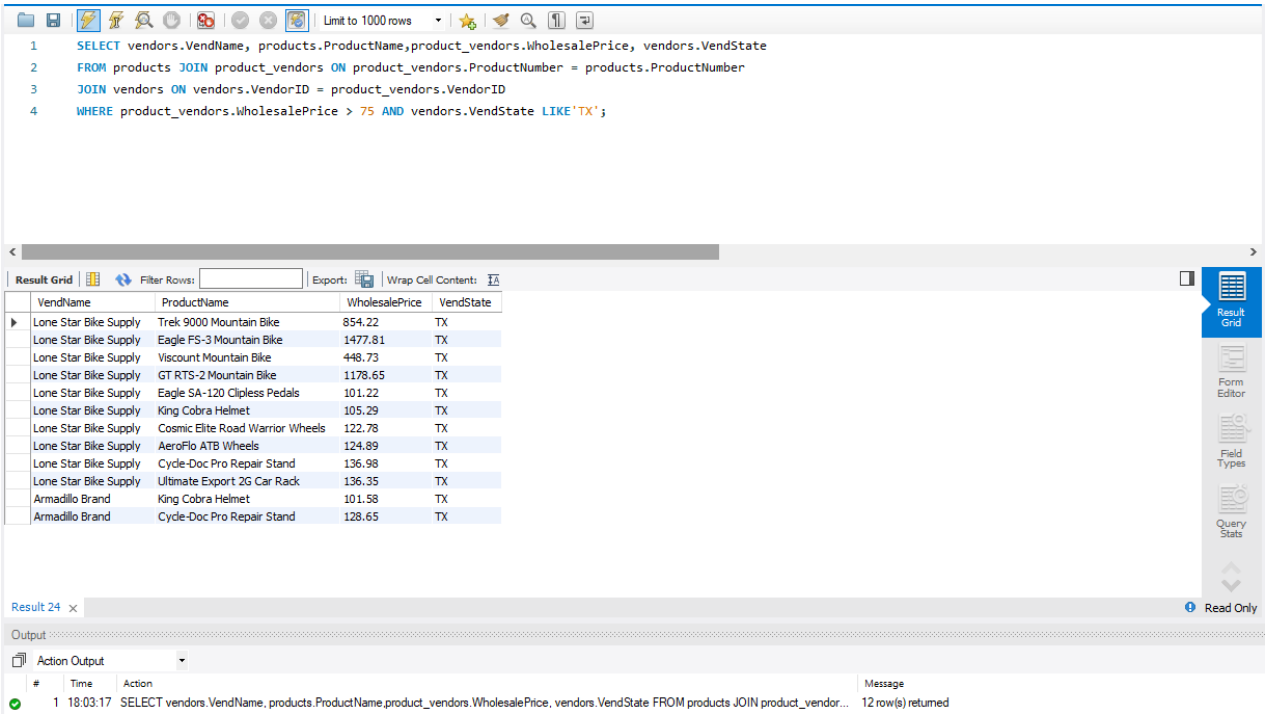
9. Show the vendors and products they supply to us for products over $75 for vendors in Texas.

a) Query: SELECT vendors.VendName,
products.ProductName,product_vendors.WholesalePrice, vendors.VendState
FROM products JOIN product_vendors ON product_vendors.ProductNumber =
products.ProductNumber
JOIN vendors ON vendors.VendorID = product_vendors.VendorID
WHERE product_vendors.WholesalePrice > 75 AND vendors.VendState LIKE'TX';

b) Columns: 4 Columns

c) Expected Row Count: 12 Rows

d) Screenshot:



10). Show employees who live in the same city and state as our vendors.

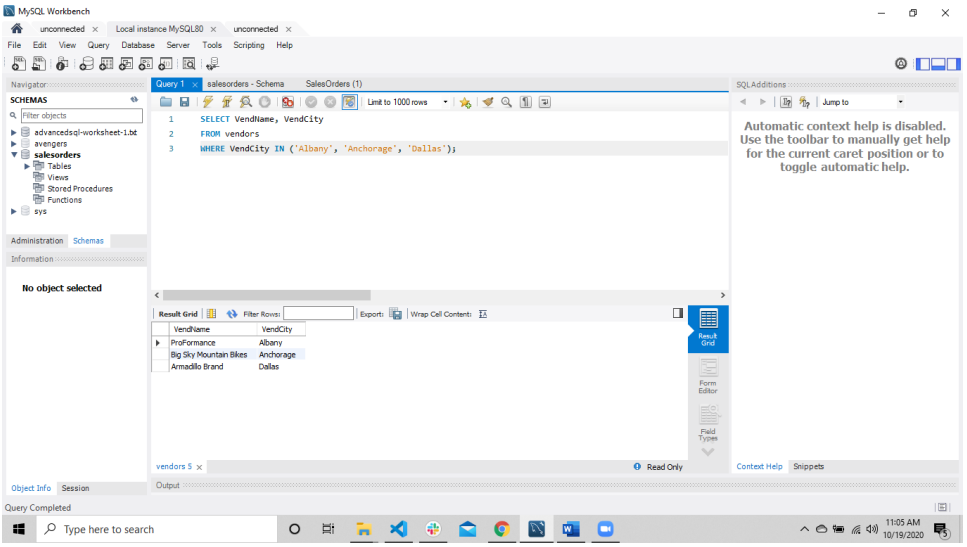
a) Query:

```
SELECT employees.EmpFirstName, employees.EmpLastName,
employees.EmpCity, employees.EmpState, vendors.VendName,
vendors.VendCity, vendors.VendState
FROM employees
INNER JOIN vendors ON employees.EmpCity = vendors.VendCity AND
employees.EmpState = vendors.VendState;
```

b) Columns: 7 Columns

c) Expected Row Count: 2 Rows

d) Screenshot:



11). Display customers who have no sales rep (employees) in the same state.

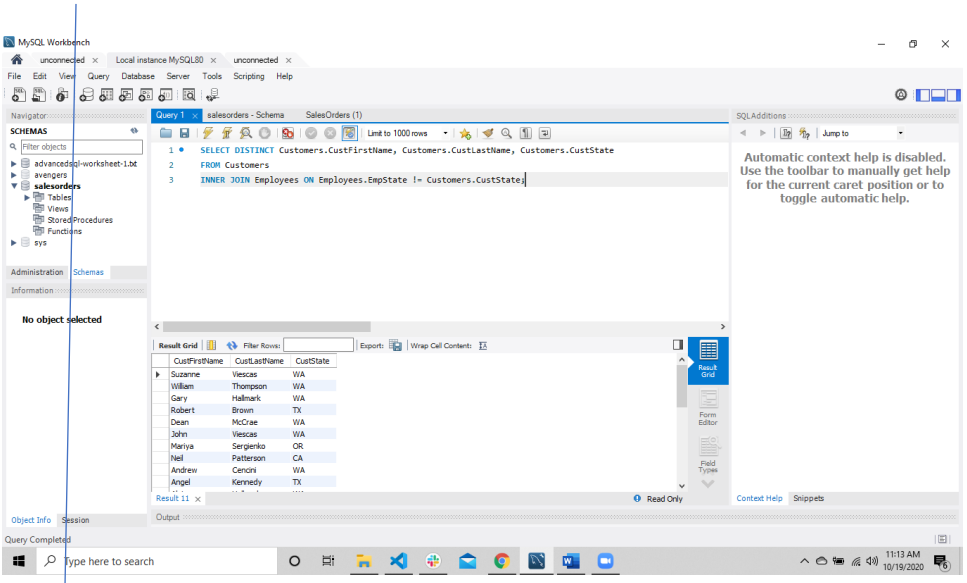
a) Query:

```
SELECT DISTINCT Customers.CustFirstName, Customers.CustLastName,
Customers.CustState
FROM Customers
INNER JOIN Employees ON Employees.EmpState != Customers.CustState;
```

b) Columns: 3 Columns

c) Expected Row Count:28 Rows

d) Screenshot:



12). What is the average quoted price of a helmet?

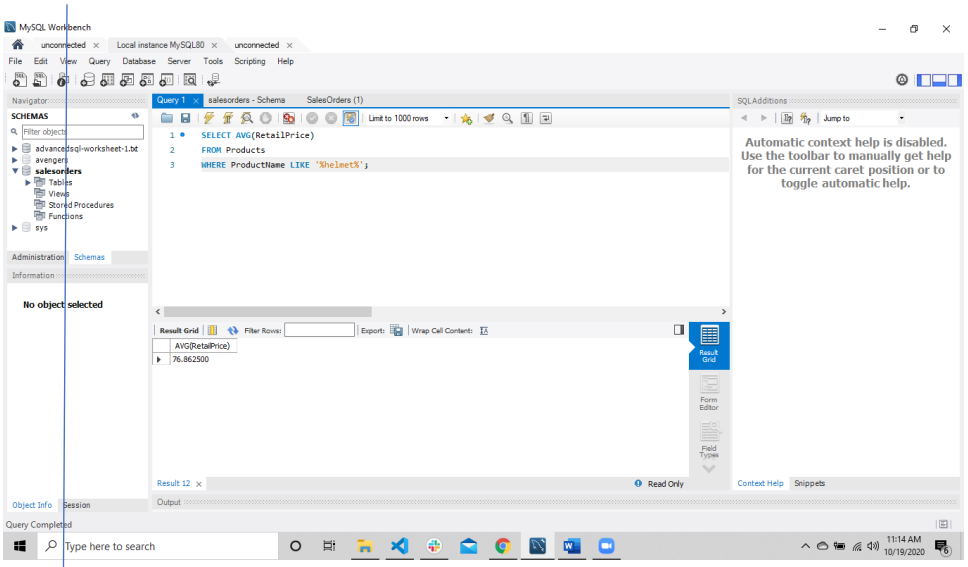
a) Query:

```
SELECT AVG(RetailPrice)
FROM Products
WHERE ProductName LIKE '%helmet%';
```

b) Columns: 1 Columns

c) Expected Row Count: 1 Row

d) Screenshot:



13). What was the date of the earliest ship date?

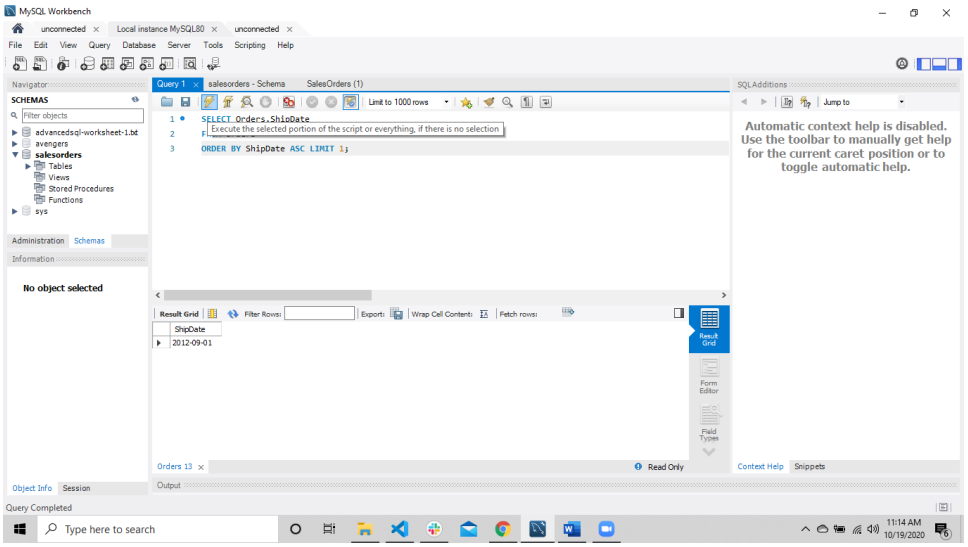
a) Query:

```
SELECT Orders.ShipDate
FROM Orders
ORDER BY ShipDate ASC LIMIT 1;
```

b) Columns: 1 Column

c) Expected Row Count: 1 Row

d) Screenshot:



14). What is the total amount (in dollars) of orders from the state of Oregon?

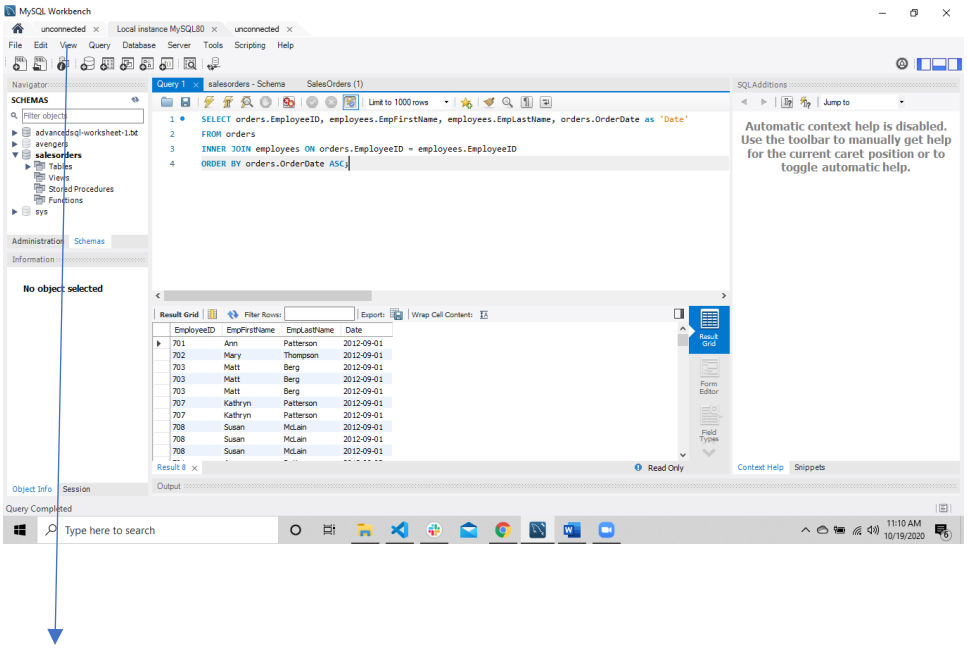
a) Query:

```
SELECT customers.CustState, SUM(orders.OrderTotal)
FROM customers
INNER JOIN orders ON customers.CustomerID = orders.CustomerID WHERE
CustState = 'OR';
```

b) Columns: 2 Columns

c) Expected Row Count: 1 Row

d) Screenshot:



15). Show each employee, the employee's total sales (in dollars), the employee's total sales item quantity, and the average item sales price ordered by the employee's average item sales price highest to lowest.

a) Query:

```
SELECT employees.EmpFirstName, employees.EmployeeID,
orders.OrderTotal, orders.EmployeeID, order_details.QuantityOrdered,
AVG(QuotedPrice)
FROM employees
INNER JOIN orders ON employees.EmployeeID = orders.EmployeeID
INNER JOIN order_details on orders.OrderNumber =
order_details.OrderNumber;
```

b) Columns: 6 Columns

c) Expected Row Count: 1000 Rows

d) Screenshot: