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**.
2. Query: SELECT \* FROM customers;
3. Columns: CustomerID, CustFirstName, CustLastName, CustStreetAddress, CustCity, CustState, CustZipCode, CustAreaCode CustPhoneNumber
4. Expected Row Count: 28
5. Screenshot: Question1
6. **Show a list of states, in reverse alphabetical order, where our vendors are located, and include the names of the vendor.**
7. Query: SELECT VendName, VendState FROM vendors

ORDER BY VendState DESC;

1. Columns: VendName, VendState
2. Expected Row Count: 11
3. Screenshot: Question2
4. **What if we adjusted the retail price of each product by increasing it 7 percent?**
5. Query: SELECT ProductName, RetailPrice, (RetailPrice \* 1.07) AS

NewPrice FROM products;

1. Columns: ProductName, RetailPrice, NewPrice
2. Expected Row Count: 40
3. Screenshot: Question3
4. **Show a list of orders made by each customer in ascending date order.**
5. Query: SELECT \* Orders

ORDER BY OrderDate ASC;

1. Columns: OrderNumber, OrderDate, ShipDate, CustomerID, EmployeeID, OrderTotal
2. Expected Row Count: 944
3. Screenshot: Question4
4. **Give the names of all vendors based in Albany, Anchorage, and Dallas.**
5. Query: SELECT VendName, VendCity From vendors

WHERE VendCity = ‘Albany’ OR VendCity = ‘Anchorage’

OR VendCIty = ‘Dallas’;

1. Columns: VendName, VendCity
2. Expected Row Count: 3
3. Screenshot: Question5
4. **Show an alphabetized list of products with a quantity on hand greater than or equal to 30.**
5. Query: SELECT \* FROM products

WHERE QuantityOnHand >= 30;

1. Columns: ProductNumber, ProductName, ProductDescription, RetailPrice,

QuantityOnHand, CategoryID

1. Expected Row Count: 9
2. Screenshot: Question6
3. **What vendors do we work with that don’t have an email address?**
4. Query: SELECT VendName, VendEMailAddress FROM vendors

WHERE VendEMailAddress IS NULL;

1. Columns: VendName, VendEMailAddress
2. Expected Row Count: 5
3. Screenshot: Question7
4. **List employees and the dates their orders shipped sorted by order date.**
5. Query: SELECT employees.EmpFirstName, orders.EmployeeID,

orders.ShipDate FROM employees, orders

Where employees.EmployeeID = orders.EmployeeID

ORDER BY orders.ShipDate;

1. Columns: EmpFirstName, EmployeeID, ShipDate
2. Expected Row Count: 944
3. Screenshot: Question8
4. **Show the vendors and products they supply to us for products over $75 for vendors in Texas.**
5. Query: SELECT vendors.VendName, products.ProductName,

product\_vendors.ProductNumber

FROM vendors, products, product\_vendors

WHERE vendors.VendorID = product\_vendors.ProductNumber

AND RetailPrice > 75 AND VendState = 'TX';

1. Columns: VendName, ProductName, ProductNumber
2. Expected Row Count: 6
3. Screenshot: Question9
4. **Show employees who live in the same city and state as our vendors.**
5. Query: SELECT employees.EmpFirstName, vendors.VendCity,

vendors.VendState From employees, vendors

Where employees.EMPCity = vendors.VendCity;

1. Columns: EmpFirstName, VendCity, VendState
2. Expected Row Count: 2
3. Screenshot: Question10
4. **Display customers who have no sales rep (employees) in the same state.**
5. Query: SELECT customers.CustFirstName, customers.CustState,

employees.EmpState FROM customers, employees

WHERE customers.CustState != employees.EmpState;

1. Columns: CustFirstName, CustState, EmpState
2. Expected Row Count: 163
3. Screenshot: Question11
4. **What is the average quoted price of a helmet?**
5. Query: SELECT AVG(order\_details.QuotedPrice), products.ProductName

FROM order\_details, products

WHERE products.ProductName LIKE '%Helmet%'

GROUP BY products.ProductName;

1. Columns: AVG(order\_details.QuotedPrice), ProductName
2. Expected Row Count: 4
3. Screenshot: Question12
4. **What was the date of the earliest ship date?**
5. Query: SELECT ShipDate From orders

ORDER BY ShipDate LIMIT 1;

1. Columns: ShipDate
2. Expected Row Count: 1
3. Screenshot: Question13
4. **What is the total amount (in dollars) of orders from the state of Oregon?**
5. Query: SELECT sum(orders.OrderTotal), customers.CustState

FROM orders, customers

Where customers.CustState = 'OR';

1. Columns: sum(orders.OrderTotal), CustState
2. Expected Row Count: 1
3. Screenshot: Question14
4. **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.**
5. Query: SELECT employees.EmpFirstName, sum(orders.OrderTotal),

count(order\_details.QuantityOrdered), AVG(orders.OrderTotal)

FROM employees

LEFT JOIN orders ON orders.EmployeeID = employees.EmployeeID

LEFT JOIN order\_details ON order\_details.OrderNumber =

orders.OrderNumber

AND orders.OrderTotal

WHERE order\_details.OrderNumber = orders.OrderNumber

AND order\_details.QuantityOrdered

GROUP BY employees.EmpFirstName;

1. Columns: EmpFirstName, sum(orders.OrderTotal),

count(order\_details.QuantityOrdered),

AVG(orders.OrderTotal)

1. Expected Row Count: 8
2. Screenshot: Question15