SQL Queries Report

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February 25, 2024

1 SQL Queries

1.1 Question 1: Return customers and their orders

```
SELECT c.CustomerID,
       (SELECT TOP 1 o.OrderID FROM Orders o WHERE o.CustomerID = c.CustomerID) AS OrderID,
       (SELECT TOP 1 o.OrderDate FROM Orders o WHERE o.CustomerID = c.CustomerID) AS OrderDa
FROM Customers c;
***
```

1.2 Question 2: Report only those customer IDs who never placed any order

```
SELECT CustomerID, NULL AS OrderID, NULL AS OrderDate
FROM Customers
WHERE CustomerID NOT IN (SELECT CustomerID FROM Orders);
```

1.3 Question 3: Report those customers who placed orders on July, 1997

```
SELECT o.CustomerID, o.OrderID, o.OrderDate
FROM Orders o
WHERE YEAR(o.OrderDate) = 1997 AND MONTH(o.OrderDate) = 7;
```

1.4 Question 4: Report the total orders of each customer

```
SELECT CustomerID, COUNT(OrderID) AS totalorders
FROM Orders
GROUP BY CustomerID;
```

1.5 Question 5: Write a query to generate a five copies of each employee

```
SELECT EmployeeID, FirstName, LastName
```

```
FROM Employees
UNION ALL
SELECT EmployeeID, FirstName, LastName
FROM Employees
UNION ALL
SELECT EmployeeID, FirstName, LastName
FROM Employees
UNION ALL
SELECT EmployeeID, FirstName, LastName
FROM Employees
UNION ALL
SELECT EmployeeID, FirstName, LastName
FROM Employees;
```

1.6 Question 6: List all the products whose price is more than average price

```
SELECT ProductName, UnitPrice
FROM Products
WHERE UnitPrice > (SELECT AVG(UnitPrice) FROM Products);
```

1.7 Question 7: Find the second highest price of product

```
SELECT DISTINCT UnitPrice
FROM Products
ORDER BY UnitPrice DESC
OFFSET 1 ROW
FETCH NEXT 1 ROW ONLY;
```

1.8 Question 8: Write a query that returns a row for each employee and day in the range 04-07-1996 through 04-08-1997

```
WITH DateRange AS (
  SELECT DATEADD(DAY, n, '1996-04-07') AS Date
  FROM dbo.Nums
  WHERE n <= DATEDIFF(DAY, '1996-04-07', '1997-04-08')
)
SELECT EmployeeID, Date
FROM Employees, DateRange;
```

1.9 Question 9: Return US customers, and for each customer return the total number of orders and total quantities

```
SELECT c.CustomerID, COUNT(o.OrderID) AS Totalorders, SUM(od.Quantity) AS Totalquantity
FROM Customers c
LEFT JOIN Orders o ON c.CustomerID = o.CustomerID
LEFT JOIN OrderDetails od ON o.OrderID = od.OrderID
GROUP BY c.CustomerID;
```

1.10 Question 10: Write a query that returns all customers in the output, but matches them with their respective orders only if they were placed on July 04, 1997

```
SELECT c.CustomerID, c.CompanyName, o.OrderID, o.OrderDate
FROM Customers c
LEFT JOIN Orders o ON c.CustomerID = o.CustomerID AND CONVERT(DATE, o.OrderDate) = '1997-07-
```

1.11 Question 11: Are there any employees who are older than their managers?

```
SELECT e1.EmployeeID, e1.FirstName, e1.LastName, e1.BirthDate AS EmployeeBirthDate,
       e2.EmployeeID AS ManagerID, e2.FirstName AS ManagerFirstName, e2.LastName AS ManagerL
FROM Employees e1
JOIN Employees e2 ON e1.ReportsTo = e2.EmployeeID
WHERE e1.BirthDate > e2.BirthDate;
```

1.12 Question 12: List the names of those employees and their ages

```
SELECT FirstName + ' ' + LastName AS EmployeeName,
       DATEDIFF(YEAR, BirthDate, GETDATE()) AS Age
FROM Employees;
```

1.13 Question 13: List the names of products which were ordered on 8th August 1997

```
SELECT DISTINCT p.ProductName, o.OrderDate
FROM Products p
JOIN OrderDetails od ON p.ProductID = od.ProductID
JOIN Orders o ON od.OrderID = o.OrderID
WHERE CONVERT(DATE, o.OrderDate) = '1997-08-08';
```

1.14 Question 14: List the addresses, cities, and countries of all orders which were serviced by Anne and were shipped late

```
SELECT ShipAddress AS Address, ShipCity AS City, ShipCountry AS Country
FROM Orders
WHERE EmployeeID = (SELECT EmployeeID FROM Employees WHERE FirstName = 'Anne')
AND ShipDate > RequiredDate;
```

1.15 Question 15: List all countries to which beverages have been shipped

```
SELECT DISTINCT ShipCountry AS Country
FROM Orders
JOIN OrderDetails od ON Orders.OrderID = od.OrderID
JOIN Products p ON od.ProductID = p.ProductID
WHERE p.CategoryID = (SELECT CategoryID FROM Categories WHERE CategoryName = 'Beverages');
```