

## **.NET Week 4 Coding Challenge - Programming Assessment.**

Date: 03-10-2023

Duration: 4 Hours.

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Write appropriate queries for the following problem statements based on the AdventureWorks database.

### **Problem 1: List Product Names and Prices**

Write a query to retrieve the names and list prices of all products in the "Production.Product" table.

### **Problem 2: Find Customers from a Specific City**

Retrieve the names and email addresses of customers who live in the city of "Seattle" from the "Sales.Customer" table.

### **Problem 3: Calculate Total Sales for a Product**

Calculate the total sales amount for the product with the ProductID of 793 from the "Sales.SalesOrderDetail" and "Production.Product" tables. Display the product name and total sales amount.

### **Problem 4: List Employees by Job Title**

List the names and job titles of employees from the "HumanResources.Employee" table, ordered by job title in ascending order.

### **Problem 5: Find Order Details for a Customer**

Retrieve all the order details (product names and quantities) for a specific customer with a CustomerID of 29485 from the "Sales.SalesOrderHeader," "Sales.SalesOrderDetail," and "Production.Product" tables.

### **Problem 6: Find Orders Placed by a Salesperson**

Find all the orders placed by a salesperson with an EmployeeID of 276 from the "Sales.SalesOrderHeader" and "HumanResources.Employee" tables. Display the order number, order date, and customer name.

### **Problem 7: Identify Inactive Customers**

List the names and email addresses of customers who have not placed any orders in the "Sales.SalesOrderHeader" table.

#### Problem 8: Calculate Average Sales per Category

Calculate the average sales amount for each product category from the "Production.ProductCategory" and "Sales.SalesOrderDetail" tables. Display the category name and average sales amount.

#### Problem 9: Find Top-Selling Products

List the top 10 best-selling products (by quantity sold) from the "Production.Product" and "Sales.SalesOrderDetail" tables. Display the product name and total quantity sold.

#### Problem 10: Identify Late Shipments

Retrieve the order numbers and ship dates of orders that were shipped after their requested ship dates from the "Sales.SalesOrderHeader" table.

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