

Customer Order Management System

Problem Statement

Create a query to retrieve detailed order information for customers. The query should join the customers and orders tables to produce a result set that includes customer details and their corresponding order details.

Requirements:

Database Schema:

- **Table: Customers**
 - CustomerID (INT, Primary Key, Auto Increment)
 - FirstName (VARCHAR(255))
 - LastName (VARCHAR(255))
 - Email (VARCHAR(255))
 - PhoneNumber (VARCHAR(15))
 - Address (VARCHAR(255))
- **Table: Orders**
 - OrderID (INT, Primary Key, Auto Increment)
 - CustomerID (INT, Foreign Key)
 - OrderDate (DATE)
 - OrderAmount (DECIMAL(10, 2))
 - OrderStatus (VARCHAR(50))

SQL Joins:

1. **Inner Join:** Retrieve a list of all customers who have placed orders, including customer details and order details.
2. **Left Join:** Retrieve a list of all customers and their orders, including those who have not placed any orders.
3. **Right Join:** Retrieve a list of all orders and the corresponding customer details, including orders without customer information (in case of data issues).
4. **Full Outer Join:** Retrieve a list of all customers and all orders, including those without matching entries.