### **Table Structure**'ll use three tables: Customers, Orders, and Products.

#### **Customers**

|  |  |  |  |
| --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Country** |
| 1 | Alfreds | Maria | Germany |
| 2 | Ana Trujillo | Ana | Mexico |
| 3 | Antonio | Antonio | Mexico |

#### **Orders**

|  |  |  |
| --- | --- | --- |
| **OrderID** | **CustomerID** | **OrderDate** |
| 1 | 1 | 2023-01-01 |
| 2 | 2 | 2023-01-02 |
| 3 | 3 | 2023-01-03 |

#### **Products**

#### 

|  |  |  |
| --- | --- | --- |
| **ProductID** | **ProductName** | **Price** |
| 1 | Apples | 1.00 |
| 2 | Oranges | 2.00 |
| 3 | Bananas | 1.50 |

1.Retrieve customers from Mexico.

2.Retrieve all orders along with the customer names.

3.Retrieve all possible combinations of customers and products.

4.Retrieve all customers who are from the same country.

5.Retrieve the number of orders placed by each customer.

6.Retrieve customers who have placed more than 1 order.

7.Update the price of Oranges to 2.50.

8.Insert a new customer into the Customers table.

9 Find customers who have not placed any orders.

10.Retrieve the total amount spent by each customer on their orders.

11.Calculate the average price of products for each order.

12.Retrieve customers along with the number of distinct products they have ordered.

13.Retrieve all customers and their orders, if any, along with any products they ordered (if available).

14.List all orders along with their products and the customers who placed those orders, including orders without products and customers without orders.

15.List all orders along with the total amount spent on each order, but only include orders with a total amount greater than $10.

16.What is a database and how does SQL relate to it?

17.Explain the difference between a primary key and a foreign key.

18.What are the differences between the CHAR and VARCHAR data types?

19.Explain Joins and Types of Joins.

20.Explain the difference between DELETE, TRUNCATE, and DROP commands.