

Foundation Technical Training

Assignment No. 1 - SQL - Task 1

Name: Niranjana Kolpe, Batch: C#-Batch 2

Task 1. Database Design

1. Create the database named "TechShop".
2. Define the schema for the Customers, Products, Orders, OrderDetails and Inventory tables based on the provided schema.
3. Create an ERD (Entity Relationship Diagram) for the database.
4. Create appropriate Primary Key and Foreign Key constraints for referential integrity.
5. Insert at least 10 sample records into each of the following tables.
 - a. Customers
 - b. Products
 - c. Orders
 - d. Order Details
 - e. Inventory

Program Code in SQL:

```
-- Niranjana Kolpe - C# Batch-2
```

```
USE master;
```

```
CREATE DATABASE NiranjanaDB;
```

```
USE NiranjanaDB;
```

```
CREATE TABLE Customers (CustomerID INT PRIMARY KEY, FirstName TEXT NOT NULL, LastName TEXT, Email VARCHAR(50), Phone DECIMAL NOT NULL, Address VARCHAR(100));
```

```
INSERT INTO Customers VALUES (1, 'Niranjana', 'Kolpe', 'niranjana@gmail.com', 9999999991, 'San Fransisco');
```

```
INSERT INTO Customers VALUES (2, 'Steve', 'Rogers', 'steve@gmail.com', 9999999992, 'Brooklyn');
```

```
INSERT INTO Customers VALUES (3, 'Tony', 'Stark', 'tony@gmail.com', 9999999993, 'New York');
```

```
INSERT INTO Customers VALUES (4, 'Natasha', 'Romanoff', 'natasha@gmail.com', 9999999994, 'New York');
```

```

INSERT INTO Customers VALUES (5, 'Bruce', 'Banner', 'bruce@gmail.com',
9999999995, 'Delhi');

INSERT INTO Customers VALUES (6, 'Thor', 'Odinson', 'thor@gmail.com',
9999999996, 'Washington');

INSERT INTO Customers VALUES (7, 'Clint', 'Barton', 'clint@gmail.com',
9999999997, 'Chennai');

INSERT INTO Customers VALUES (8, 'Wanda', 'Maximoff', 'wanda@gmail.com',
9999999998, 'Mumbai');

INSERT INTO Customers VALUES (9, 'Sam', 'Wilson', 'sam@gmail.com',
9999999999, 'San Fransisco');

INSERT INTO Customers VALUES (10, 'Peter', 'Parker', 'peter@gmail.com',
9999999981, 'Queens');

SELECT * FROM Customers;

```

```

CREATE TABLE Products (ProductID INT PRIMARY KEY, ProductName TEXT NOT NULL,
Description VARCHAR(100), Price INT NOT NULL);

INSERT INTO Products VALUES (1, 'Smartphone', 'Android Smartphone',
10000);

INSERT INTO Products VALUES (2, 'Powerbank', 'Powerbank for Smartphones',
3000);

INSERT INTO Products VALUES (3, 'Airpods', 'Wireless Airpods',
1000);

INSERT INTO Products VALUES (4, 'Earphones', 'Wired Earphones', 100);

INSERT INTO Products VALUES (5, 'USB Cable', 'USB Cable', 100);

INSERT INTO Products VALUES (6, 'Mouse', 'Wired Mouse', 300);

INSERT INTO Products VALUES (7, 'Router', 'Wifi Router',
1500);

INSERT INTO Products VALUES (8, 'Monitor', 'Desktop Monitor',
4000);

```

```
INSERT INTO Products VALUES (9, 'Keyboard', 'PC Keyboard', 1000);
```

```
INSERT INTO Products VALUES (10, 'Charger', 'Mobile Charger', 200);
```

```
SELECT * FROM Products;
```

```
CREATE TABLE Orders (OrderID INT PRIMARY KEY, CustomerID INT FOREIGN KEY REFERENCES Customers(CustomerID), OrderDate DATE, TotalAmount INT);
```

```
INSERT INTO Orders VALUES (1, 5, '2024-09-01', 1000);
```

```
INSERT INTO Orders VALUES (2, 7, '2024-09-02', 3000);
```

```
INSERT INTO Orders VALUES (3, 6, '2024-09-02', 10000);
```

```
INSERT INTO Orders VALUES (4, 4, '2024-09-03', 4000);
```

```
INSERT INTO Orders VALUES (5, 9, '2024-09-04', 2000);
```

```
INSERT INTO Orders VALUES (6, 2, '2024-09-06', 500);
```

```
INSERT INTO Orders VALUES (7, 1, '2024-09-15', 200);
```

```
INSERT INTO Orders VALUES (8, 3, '2024-09-16', 10000);
```

```
INSERT INTO Orders VALUES (9, 8, '2024-09-17', 6000);
```

```
INSERT INTO Orders VALUES (10, 10, '2024-09-18', 7000);
```

```
SELECT * FROM Orders;
```

```
CREATE TABLE OrderDetails (OrderDetailID INT PRIMARY KEY, OrderID INT FOREIGN KEY REFERENCES Orders(OrderID),
```

```
ProductID INT FOREIGN KEY REFERENCES Products(ProductID), Quantity INT);
```

```
INSERT INTO OrderDetails VALUES (1, 1, 3, 1);
```

```
INSERT INTO OrderDetails VALUES (2, 2, 2, 1);
```

```
INSERT INTO OrderDetails VALUES (3, 3, 1, 1);
```

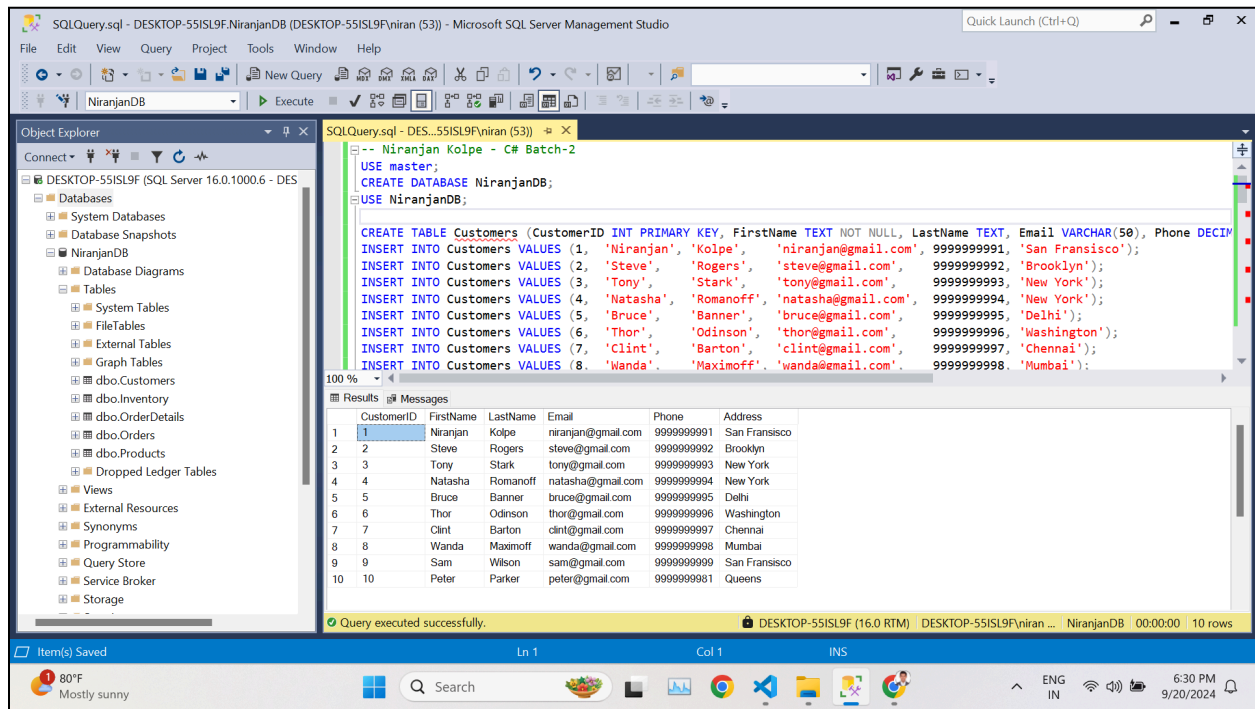
```
INSERT INTO OrderDetails VALUES (4, 4, 8, 1);
```

```
INSERT INTO OrderDetails VALUES (5, 5, 9, 2);
```

```
INSERT INTO OrderDetails VALUES (6, 6, 4, 5);
INSERT INTO OrderDetails VALUES (7, 7, 10, 1);
INSERT INTO OrderDetails VALUES (8, 8, 9, 10);
INSERT INTO OrderDetails VALUES (9, 9, 7, 4);
INSERT INTO OrderDetails VALUES (10, 10, 3, 7);
SELECT * FROM OrderDetails;
```

```
CREATE TABLE Inventory (InventoryID INT PRIMARY KEY, ProductID INT FOREIGN KEY
REFERENCES Products(ProductID), QuantityInStock INT, LastStockUpdate DATETIME);
INSERT INTO Inventory VALUES (1, 1, 23, '2024-09-19');
INSERT INTO Inventory VALUES (2, 2, 26, '2024-09-19');
INSERT INTO Inventory VALUES (3, 3, 63, '2024-09-19');
INSERT INTO Inventory VALUES (4, 4, 52, '2024-09-19');
INSERT INTO Inventory VALUES (5, 5, 92, '2024-09-19');
INSERT INTO Inventory VALUES (6, 6, 12, '2024-09-19');
INSERT INTO Inventory VALUES (7, 7, 38, '2024-09-19');
INSERT INTO Inventory VALUES (8, 8, 84, '2024-09-20');
INSERT INTO Inventory VALUES (9, 9, 97, '2024-09-20');
INSERT INTO Inventory VALUES (10, 10, 14, '2024-09-20');
SELECT * FROM Inventory;
```

Output:



SQLQuery.sql - DESKTOP-55ISL9F.NiranjanDB (DESKTOP-55ISL9F.Niran (53)) - Microsoft SQL Server Management Studio

Object Explorer

- Connect
- DESKTOP-55ISL9F (SQL Server 16.0.1000.6 - DESKTOP-55ISL9F.NiranjanDB)
- Databases
 - System Databases
 - Database Snapshots
 - NiranjanDB
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Customers
 - dbo.Inventory
 - dbo.OrderDetails
 - dbo.Orders
 - dbo.Products
 - Dropped Ledger Tables
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Query Store
 - Service Broker
 - Storage

SQLQuery.sql - DESKTOP-55ISL9F.Niran (53)

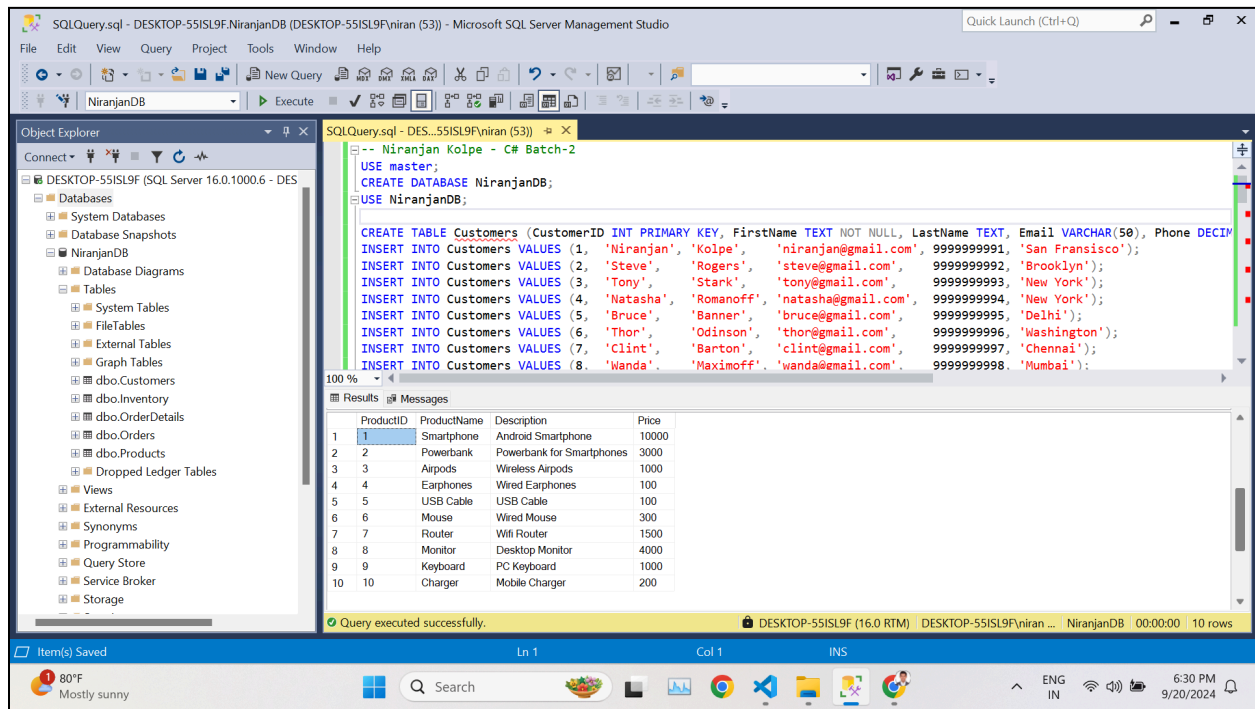
```
-- Niranjan Kolpe - C# Batch-2
USE master;
CREATE DATABASE NiranjanDB;
USE NiranjanDB;

CREATE TABLE Customers (CustomerID INT PRIMARY KEY, FirstName TEXT NOT NULL, LastName TEXT, Email VARCHAR(50), Phone DECIMAL(10,4), Address TEXT);
INSERT INTO Customers VALUES (1, 'Niranjan', 'Kolpe', 'niranjan@gmail.com', 9999999991, 'San Francisco');
INSERT INTO Customers VALUES (2, 'Steve', 'Rogers', 'steve@gmail.com', 9999999992, 'Brooklyn');
INSERT INTO Customers VALUES (3, 'Tony', 'Stark', 'tony@gmail.com', 9999999993, 'New York');
INSERT INTO Customers VALUES (4, 'Natasha', 'Romanoff', 'natasha@gmail.com', 9999999994, 'New York');
INSERT INTO Customers VALUES (5, 'Bruce', 'Banner', 'bruce@gmail.com', 9999999995, 'Delhi');
INSERT INTO Customers VALUES (6, 'Thor', 'Odinson', 'thor@gmail.com', 9999999996, 'Washington');
INSERT INTO Customers VALUES (7, 'Clint', 'Barton', 'clint@gmail.com', 9999999997, 'Chennai');
INSERT INTO Customers VALUES (8, 'Wanda', 'Maximoff', 'wanda@gmail.com', 9999999998, 'Mumbai');
INSERT INTO Customers VALUES (9, 'Sam', 'Wilson', 'sam@gmail.com', 9999999999, 'San Francisco');
INSERT INTO Customers VALUES (10, 'Peter', 'Parker', 'peter@gmail.com', 9999999981, 'Queens');
```

Results

CustomerID	FirstName	LastName	Email	Phone	Address
1	Niranjan	Kolpe	niranjan@gmail.com	9999999991	San Francisco
2	Steve	Rogers	steve@gmail.com	9999999992	Brooklyn
3	Tony	Stark	tony@gmail.com	9999999993	New York
4	Natasha	Romanoff	natasha@gmail.com	9999999994	New York
5	Bruce	Banner	bruce@gmail.com	9999999995	Delhi
6	Thor	Odinson	thor@gmail.com	9999999996	Washington
7	Clint	Barton	clint@gmail.com	9999999997	Chennai
8	Wanda	Maximoff	wanda@gmail.com	9999999998	Mumbai
9	Sam	Wilson	sam@gmail.com	9999999999	San Francisco
10	Peter	Parker	peter@gmail.com	9999999981	Queens

Query executed successfully. DESKTOP-55ISL9F (16.0 RTM) DESKTOP-55ISL9F.Niran ... NiranjanDB 00:00:00 10 rows



SQLQuery.sql - DESKTOP-55ISL9F.NiranjanDB (DESKTOP-55ISL9F.Niran (53)) - Microsoft SQL Server Management Studio

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```

Results

ProductID	ProductName	Description	Price
1	Smartphone	Android Smartphone	10000
2	Powerbank	Powerbank for Smartphones	3000
3	Airpods	Wireless Airpods	1000
4	Earphones	Wired Earphones	100
5	USB Cable	USB Cable	100
6	Mouse	Wired Mouse	300
7	Router	WiFi Router	1500
8	Monitor	Desktop Monitor	4000
9	Keyboard	PC Keyboard	1000
10	Charger	Mobile Charger	200

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File Edit View Query Project Tools Window Help

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```

Results

OrderID	CustomerID	OrderDate	TotalAmount
1	5	2024-09-01	1000
2	7	2024-09-02	3000
3	6	2024-09-02	10000
4	4	2024-09-03	4000
5	9	2024-09-04	2000
6	2	2024-09-06	500
7	1	2024-09-15	200
8	3	2024-09-16	10000
9	8	2024-09-17	6000
10	10	2024-09-18	7000

Query executed successfully.

DESKTOP-55ISL9F (16.0 RTM) DESKTOP-55ISL9F\Niran ... NiranjanDB 00:00:00 10 rows

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Search

6:30 PM 9/20/2024

SQLQuery.sql - DESKTOP-55ISL9F.NiranjanDB (DESKTOP-55ISL9F\Niran (53)) - Microsoft SQL Server Management Studio

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```

Results

OrderDetailID	OrderID	ProductID	Quantity
1	1	3	1
2	2	2	1
3	3	1	1
4	4	8	1
5	5	9	2
6	6	4	5
7	7	10	1
8	8	9	10
9	9	7	4
10	10	3	7

Query executed successfully.

DESKTOP-55ISL9F (16.0 RTM) DESKTOP-55ISL9F\Niran ... NiranjanDB 00:00:00 10 rows

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Search

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SQLQuery.sql - DESKTOP-55ISL9F.NiranjanDB (DESKTOP-55ISL9F\Niran (53)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

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Connect ▼

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```

Results

InventoryID	ProductID	QuantityInStock	LastStockUpdate
2	2	26	2024-09-19 00:00:00.000
3	3	63	2024-09-19 00:00:00.000
4	4	52	2024-09-19 00:00:00.000
5	5	92	2024-09-19 00:00:00.000
6	6	12	2024-09-19 00:00:00.000
7	7	38	2024-09-19 00:00:00.000
8	8	84	2024-09-20 00:00:00.000
9	9	97	2024-09-20 00:00:00.000
10	10	14	2024-09-20 00:00:00.000

Query executed successfully. DESKTOP-55ISL9F (16.0 RTM) DESKTOP-55ISL9F\Niran ... NiranjanDB 00:00:00 10 rows

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Entity Relationship Diagram (ERD):

