

HEXAWARE PHASE-2 FOUNDATION TRAINING

ASSIGNMENT-1

TASK-1: DATABASE DESIGN

1. Create the Database

```
CREATE DATABASE TechShop;
```

```
USE TechShop;
```

2. Create Tables

```
CREATE TABLE Customers (  
    CustomerID INT PRIMARY KEY IDENTITY(1,1),  
    FirstName VARCHAR(50),  
    LastName VARCHAR(50),  
    Email VARCHAR(100) UNIQUE,  
    Phone VARCHAR(15),  
    Address VARCHAR(255)  
);
```

```
CREATE TABLE Products (  
    ProductID INT PRIMARY KEY IDENTITY(1,1),  
    ProductName VARCHAR(100),  
    Description NVARCHAR(MAX),  
    Price DECIMAL(10,2)  
);
```

```
CREATE TABLE Orders (  
    OrderID INT PRIMARY KEY IDENTITY(1,1),  
    CustomerID INT,  
    OrderDate DATE,  
    TotalAmount DECIMAL(10,2),  
    FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID) ON DELETE  
CASCADE
```

);

CREATE TABLE OrderDetails (

OrderDetailID INT PRIMARY KEY IDENTITY(1,1),

OrderID INT,

ProductID INT,

Quantity INT,

FOREIGN KEY (OrderID) REFERENCES Orders(OrderID) ON DELETE CASCADE,

FOREIGN KEY (ProductID) REFERENCES Products(ProductID) ON DELETE CASCADE

);

CREATE TABLE Inventory (

InventoryID INT PRIMARY KEY IDENTITY(1,1),

ProductID INT,

QuantityInStock INT,

LastStockUpdate DATE,

FOREIGN KEY (ProductID) REFERENCES Products(ProductID) ON DELETE CASCADE

);

5. Insert Sample Data

--Customers Table

INSERT INTO Customers (FirstName, LastName, Email, Phone, Address)

VALUES

('Nilaa', 'John', 'nilajohn@gmail.com', '9329482340', '12 MG Road, Chennai'),

('Varun', 'Kumar', 'varunkumar@gmail.com', '9836482292', '45 Anna Nagar, Coimbatore'),

('Teena', 'Thomas', 'teenathomas@gmail.com', '8956789012', '78 Gandhi Road, Madurai'),

('Riyaa', 'Agarwal', 'riyaaagarwal@gmail.com', '8867890123', '56 Raja Street, Trichy'),

('Karthik', 'Dev', 'karthikdev@gmail.com', '7678901234', '34 Kaveri Street, Salem'),

('Manoj', 'Reddy', 'manojreddy@gmail.com', '9876543210', '21 Besant Nagar, Chennai'),

('Meera', 'Suresh', 'meerasuresh@gmail.com', '9012345678', '67 T. Nagar, Chennai'),

('Ajay', 'Menon', 'ajaymenon@gmail.com', '9876765432', '101 Vyttila, Kochi'),

('Vikram', 'Pillai', 'vikrampillai@gmail.com', '8765432198', '33 MG Road, Bangalore'),

('Divya', 'Shankar', 'divyashankar@gmail.com', '7890123456', '90 Rajaji Nagar, Hyderabad');

--Products Table

INSERT INTO Products (ProductName, Description, Price)

VALUES

('Smartphone', 'Latest 5G smartphone with OLED display', 29999),
('Laptop', 'Powerful laptop with 16GB RAM and SSD', 65999),
('Tablet', '10-inch tablet with stylus support', 24999),
('Wireless Earbuds', 'Noise-canceling Bluetooth earbuds', 4999),
('Smartwatch', 'Water-resistant smartwatch with heart rate monitor', 7999),
('Bluetooth Speaker', 'Portable speaker with deep bass', 2999),
('Gaming Mouse', 'Ergonomic gaming mouse with RGB lights', 1999),
('Mechanical Keyboard', 'Mechanical keyboard with red switches', 4999),
('Power Bank', '20000mAh fast-charging power bank', 2499),
('USB-C Charger', '65W fast-charging adapter', 1999);

--Orders Table

INSERT INTO Orders (CustomerID, OrderDate, TotalAmount)

VALUES

(1, '2025-03-01', 29999),
(2, '2025-03-02', 65999),
(3, '2025-03-03', 24999),
(4, '2025-03-04', 7999),
(5, '2025-03-05', 1999),
(6, '2025-03-06', 4999),
(7, '2025-03-07', 2999),
(8, '2025-03-08', 2499),
(9, '2025-03-09', 1999),
(10, '2025-03-10', 4999);

--OrderDetails Table

INSERT INTO OrderDetails (OrderID, ProductID, Quantity)

VALUES

(1, 1, 1),
(2, 2, 1),
(3, 3, 1),
(4, 5, 1),
(5, 7, 1),
(6, 4, 1),
(7, 6, 1),

(8, 9, 1),
(9, 10, 1),
(10, 8, 1);

--Inventory Table

```
INSERT INTO Inventory (ProductID, QuantityInStock, LastStockUpdate)
VALUES
```

```
(1, 50, '2025-02-25'),
(2, 30, '2025-02-24'),
(3, 40, '2025-02-23'),
(4, 100, '2025-02-22'),
(5, 60, '2025-02-21'),
(6, 80, '2025-02-20'),
(7, 90, '2025-02-19'),
(8, 70, '2025-02-18'),
(9, 85, '2025-02-17'),
(10, 95, '2025-02-16');
```

3. Entity Relationship Diagram

