-- Create Customers table

CREATE TABLE Customers (

CustomerID INT PRIMARY KEY IDENTITY(1,1),

Name VARCHAR(100),

Email VARCHAR(100),

Phone VARCHAR(20)

);

-- Create Orders table

CREATE TABLE Orders (

OrderID INT PRIMARY KEY IDENTITY(1,1),

CustomerID INT,

OrderDate DATE,

FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID)

);

-- Create Categories table

CREATE TABLE Categories (

CategoryID INT PRIMARY KEY IDENTITY(1,1),

Name VARCHAR(100)

);

-- Create Products table

CREATE TABLE Products (

ProductID INT PRIMARY KEY IDENTITY(1,1),

Name VARCHAR(100),

Price DECIMAL(10, 2),

CategoryID INT,

FOREIGN KEY (CategoryID) REFERENCES Categories(CategoryID)

);

-- Create OrderDetails table

CREATE TABLE OrderDetails (

OrderDetailID INT PRIMARY KEY IDENTITY(1,1),

OrderID INT,

ProductID INT,

Quantity INT,

FOREIGN KEY (OrderID) REFERENCES Orders(OrderID),

FOREIGN KEY (ProductID) REFERENCES Products(ProductID)

);

-- Insert records into Customers table

INSERT INTO Customers (Name, Email, Phone) VALUES

('John Doe', 'john@example.com', '123-456-7890'),

('Jane Smith', 'jane@example.com', '987-654-3210'),

('John Doe', 'john@example.com', '123-456-7890'),

('Alice Johnson', 'alice@example.com', '456-789-0123'),

('Michael Brown', 'michael@example.com', '789-012-3456'),

('Emily Davis', 'emily@example.com', '012-345-6789'),

('William Wilson', 'william@example.com', '234-567-8901'),

('Sophia Martinez', 'sophia@example.com', '567-890-1234'),

('David Anderson', 'david@example.com', '890-123-4567'),

('Olivia Taylor', 'olivia@example.com', '345-678-9012'),

('James Thomas', 'james@example.com', '678-901-2345'),

('Emma Hernandez', 'emma@example.com', '901-234-5678'),

('Daniel Wright', 'daniel@example.com', '432-109-8765'),

('Ava Lopez', 'ava@example.com', '654-321-0987'),

('Liam King', 'liam@example.com', '321-098-7654'),

('Mia Lee', 'mia@example.com', '543-210-9876'),

('Benjamin Scott', 'benjamin@example.com', '876-543-2109'),

('Charlotte Green', 'charlotte@example.com', '210-987-6543'),

('Ethan Adams', 'ethan@example.com', '987-654-3210'),

('Isabella Baker', 'isabella@example.com', '321-543-0987');

-- Insert records into Orders table

INSERT INTO Orders (CustomerID, OrderDate) VALUES

(1, '2024-05-15'),

(2, '2024-05-16'),

(3, '2024-05-17'),

(4, '2024-05-18'),

(5, '2024-05-19'),

(6, '2024-05-20'),

(7, '2024-05-21'),

(8, '2024-05-22'),

(9, '2024-05-23'),

(10, '2024-05-24'),

(11, '2024-05-25'),

(12, '2024-05-26'),

(13, '2024-05-27'),

(14, '2024-05-28'),

(15, '2024-05-29'),

(16, '2024-05-30'),

(17, '2024-05-31'),

(18, '2024-06-01'),

(19, '2024-06-02'),

(20, '2024-06-03'),

(21, '2024-06-04');

-- Insert records into Categories table

INSERT INTO Categories (Name) VALUES

('Electronics'),

('Clothing'),

('Books'),

('Toys'),

('Kitchenware'),

('Furniture'),

('Stationery'),

('Sporting Goods'),

('Jewelry'),

('Automotive'),

('Beauty Products'),

('Home Appliances'),

('Pet Supplies'),

('Gardening Tools'),

('Musical Instruments'),

('Healthcare Products'),

('Art Supplies'),

('Baby Products'),

('Outdoor Gear'),

('Office Supplies');

-- Insert records into Products table

INSERT INTO Products (Name, Price, CategoryID) VALUES

('Laptop', 999.99, 1),

('T-Shirt', 19.99, 2),

('Jeans', 49.99, 1),

('Sneakers', 79.99, 1),

('Dress Shirt', 34.99, 1),

('Skirt', 39.99, 1),

('Hoodie', 54.99, 1),

('Pants', 44.99, 1),

('Jacket', 69.99, 1),

('Dress', 59.99, 1),

('Socks', 9.99, 3),

('Sunglasses', 29.99, 1),

('Hat', 24.99, 1),

('Belt', 19.99, 1),

('Gloves', 14.99, 1),

('Scarf', 19.99, 1),

('Underwear', 12.99, 3),

('Pajamas', 29.99, 1),

('Swimsuit', 39.99, 1),

('Coat', 79.99, 1);

-- Insert records into OrderDetails table

INSERT INTO OrderDetails (OrderID, ProductID, Quantity) VALUES

(1, 1, 2),

(2, 2, 3),

(3, 4, 2),

(1, 5, 3),

(6, 2, 1),

(4, 3, 5),

(2, 6, 4),

(5, 1, 2),

(3, 2, 6),

(1, 4, 5),

(6, 5, 3),

(2, 1, 4),

(4, 6, 1),

(5, 3, 2),

(1, 2, 6),

(3, 5, 1),

(4, 1, 3),

(6, 4, 5),

(2, 3, 1),

(5, 6, 4);

-- Query to test relationships

SELECT \* FROM Customers

JOIN Orders ON Customers.CustomerID = Orders.CustomerID

JOIN OrderDetails ON Orders.OrderID = OrderDetails.OrderID

JOIN Products ON OrderDetails.ProductID = Products.ProductID

JOIN Categories ON Products.CategoryID = Categories.CategoryID;