

DATA: CASE STUDY 1

SQL Query to Create the Schema:

```
- Create Books table
CREATE TABLE Books (
  book_id INT PRIMARY KEY,
  title VARCHAR(255) NOT NULL,
  author VARCHAR(255) NOT NULL,
  genre VARCHAR(100),
  price DECIMAL(10, 2) NOT NULL,
  inventory_count INT NOT NULL
);
```

```
- Create Customers table
CREATE TABLE Customers (
  customer_id INT PRIMARY KEY,
  first_name VARCHAR(50) NOT NULL,
  last_name VARCHAR(50) NOT NULL,
  email VARCHAR(100),
  phone VARCHAR(20)
);
```

```
-- Create Orders table
CREATE TABLE Orders (
  order_id INT PRIMARY KEY,
  customer_id INT,
  book_id INT,
  order_date DATE,
  quantity INT,
  FOREIGN KEY (customer_id) REFERENCES Customers(customer_id),
  FOREIGN KEY (book_id) REFERENCES Books(book_id)
);
```

Sample Data for Books Table:

```
INSERT INTO Books (book_id, title, author, genre, price,
inventory_count) VALUES
  ('B001', 'The Great Gatsby', 'F. Scott Fitzgerald', 'Classic',
12.99, 25),
  ('B002', 'To Kill a Mockingbird', 'Harper Lee', 'Fiction', 9.99,
50),
  ('B003', '1984', 'George Orwell', 'Dystopian', 11.50, 30),
  ('B004', 'Pride and Prejudice', 'Jane Austen', 'Romance', 10.99,
40),
  ('B005', 'The Catcher in the Rye', 'J.D. Salinger', 'Classic',
8.99, 35),
```

```

    ('B006', 'The Girl with the Dragon Tattoo', 'Stieg Larsson',
'Mystery', 14.50, 20),
    ('B007', 'Gone Girl', 'Gillian Flynn', 'Mystery', 12.49, 15),
    ('B008', 'The Da Vinci Code', 'Dan Brown', 'Thriller', 13.99, 18),
    ('B009', 'The Hunger Games', 'Suzanne Collins', 'Young Adult',
10.00, 45),
    ('B010', 'The Road', 'Cormac McCarthy', 'Post-apocalyptic', 9.95,
22);

```

Sample Data for Customers Table:

```

-- Insert sample data into Customers table
INSERT INTO Customers (customer_id, first_name, last_name, email,
phone) VALUES
    ('C001', 'John', 'Doe', 'johndoe@example.com', '123-456-7890'),
    ('C002', 'Jane', 'Smith', 'janesmith@example.com', '987-654-3210'),
    ('C003', 'Alice', 'Johnson', 'alicejohnson@example.com',
'555-123-4567'),
    ('C004', 'Bob', 'Brown', 'bobbrown@example.com', '777-888-9999'),
    ('C005', 'Emily', 'Davis', 'emilydavis@example.com',
'444-555-6666');

```

Sample Data for Orders Table:

```

-- Insert sample data into Orders table
INSERT INTO Orders (order_id, customer_id, book_id, order_date,
quantity) VALUES
    ('O001', 'C001', 'B001', '2024-04-01', 2),
    ('O002', 'C002', 'B002', '2024-04-02', 1),
    ('O003', 'C003', 'B003', '2024-04-03', 3),
    ('O004', 'C004', 'B004', '2024-04-04', 1),
    ('O005', 'C005', 'B005', '2024-04-05', 2),
    ('O006', 'C001', 'B002', '2024-04-06', 1),
    ('O007', 'C002', 'B003', '2024-04-07', 2),
    ('O008', 'C003', 'B004', '2024-04-08', 1),
    ('O009', 'C004', 'B005', '2024-04-09', 3),
    ('O010', 'C005', 'B001', '2024-04-10', 2);

```