CREATE DATABASE cotton\_db;

USE cotton\_db;

CREATE TABLE Users (

user\_id INT PRIMARY KEY AUTO\_INCREMENT,

username VARCHAR(255) NOT NULL,

user\_type ENUM('Buyer', 'Seller', 'Admin') NOT NULL,

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

CREATE TABLE Products (

product\_id INT PRIMARY KEY AUTO\_INCREMENT,

seller\_id INT,

product\_name VARCHAR(255) NOT NULL,

product\_description TEXT,

price DECIMAL(10, 2) NOT NULL,

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (seller\_id) REFERENCES Users(user\_id)

);

CREATE TABLE Orders (

order\_id INT PRIMARY KEY AUTO\_INCREMENT,

buyer\_id INT,

order\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (buyer\_id) REFERENCES Users(user\_id)

);

CREATE TABLE Order\_Products (

order\_product\_id INT PRIMARY KEY AUTO\_INCREMENT,

order\_id INT,

product\_id INT,

quantity INT NOT NULL,

FOREIGN KEY (order\_id) REFERENCES Orders(order\_id),

FOREIGN KEY (product\_id) REFERENCES Products(product\_id)

);

CREATE TABLE Payments (

payment\_id INT PRIMARY KEY AUTO\_INCREMENT,

order\_id INT,

amount DECIMAL(10, 2) NOT NULL,

payment\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (order\_id) REFERENCES Orders(order\_id)

);

CREATE TABLE Shipments (

shipment\_id INT PRIMARY KEY AUTO\_INCREMENT,

order\_id INT,

shipment\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

delivery\_status ENUM('Pending', 'Shipped', 'Delivered') NOT NULL,

FOREIGN KEY (order\_id) REFERENCES Orders(order\_id)

);

CREATE TABLE Admin\_Shipments (

admin\_id INT,

shipment\_id INT,

PRIMARY KEY (admin\_id, shipment\_id),

FOREIGN KEY (admin\_id) REFERENCES Users(user\_id),

FOREIGN KEY (shipment\_id) REFERENCES Shipments(shipment\_id)

);

CREATE TABLE Admin\_Products (

admin\_id INT,

product\_id INT,

PRIMARY KEY (admin\_id, product\_id),

FOREIGN KEY (admin\_id) REFERENCES Users(user\_id),

FOREIGN KEY (product\_id) REFERENCES Products(product\_id)

);

Optional just for reference

-- Insert Users

INSERT INTO Users (username, user\_type) VALUES ('buyer1', 'Buyer');

INSERT INTO Users (username, user\_type) VALUES ('seller1', 'Seller');

INSERT INTO Users (username, user\_type) VALUES ('admin1', 'Admin');

-- Insert Products

INSERT INTO Products (seller\_id, product\_name, product\_description, price) VALUES (2, 'Product A', 'Description of Product A', 10.00);

INSERT INTO Products (seller\_id, product\_name, product\_description, price) VALUES (2, 'Product B', 'Description of Product B', 20.00);

-- Insert Orders

INSERT INTO Orders (buyer\_id) VALUES (1);

-- Insert Order Products

INSERT INTO Order\_Products (order\_id, product\_id, quantity) VALUES (1, 1, 2); -- 2 of Product A

-- Insert Payments

INSERT INTO Payments (order\_id, amount) VALUES (1, 20.00); -- Payment for Order 1

-- Insert Shipments

INSERT INTO Shipments (order\_id, delivery\_status) VALUES (1, 'Pending');