ECOMMERCE DATA MODELLING

- **USERS TABLE**

Attribute Name	**Data Type**	**Length**	**Key Type**	**Description**
userId	INT	-	Primary Key	Unique Identifier for each User
name	VARCHAR	100	-	Name of User
phone	CHAR	10	-	Phone Number
role	ENUM	-	-	Role of User ‘Customer’ ‘Admin’

- **PRODUCTS TABLE**

Attribute Name	**Data Type**	**Length**	**Key Type**	**Description**
productId	INT	-	Primary Key	Unique Identifier for each Product
productName	VARCHAR	100	-	Name of Product
description	TEXT		-	Description
price	DECIMAL	10,2	-	Cost
quantity	INT	-	-	Available Quantity

- **ORDERS TABLE**

Attribute Name	Data Type	Length	Key Type	Description
orderId	CHAR	10	Primary Key	10 digit unique key associated for each order
userId	INT	-	Foreign Key	References the userId from USER TABLE
totalPrice	DECIMAL	10,2	-	Combined price of all order
orderStatus	ENUM	-	-	‘PENDING’ ‘DELIVERED’ ‘CANCELLED’

- **ORDERITEMS TABLE**

Attribute Name	Data Type	Length	Key Type	Description
id	INT	-	Primary Key	Unique Identifier
orderId	INT	-	Foreign Key	References ORDER TABLE
productId	INT	-	Foreign Key	References PRODUCT TABLE
quantity	INT	-	-	Quantity of item ordered
price	DECIMAL	10,2	-	Price per item
total	DECIMAL	10,2	-	quantity*price

SQL QUERY

```
--USERS

CREATE TABLE users (
        userId INT PRIMARY KEY,
        name VARCHAR(255) NOT NULL,
        phone CHAR(10) NOT NULL,
        role ENUM('CUSTOMER', 'ADMIN') NOT NULL,
);


--PRODUCTS

CREATE TABLE products (
        productId INT PRIMARY KEY,
        name VARCHAR(255) NOT NULL,
        description TEXT,
        price DECIMAL(10,2) NOT NULL,
        quantity INT NOT NULL DEFAULT 0,
);
—---------------------------------------------------------------------------------------------------------
--ORDERS

CREATE TABLE orders (
        orderId CHAR(10) PRIMARY KEY,
        userId INT NOT NULL,
        totalPrice DECIMAL(10,2) NOT NULL DEFAULT 0.00,
        status ENUM('PENDING', 'DELIVERED', 'CANCELLED') NOT NULL DEFAULT
'PENDING',
        FOREIGN KEY (userId) REFERENCES users(userId)
);
—----------------------------------------------------------------------------------------------------------------
--ORDER ITEMS

CREATE TABLE orderItems (
        id INT PRIMARY KEY,
        orderId INT NOT NULL,
        productId INT NOT NULL,
        quantity INT NOT NULL,
        price DECIMAL(10,2) NOT NULL,
        total DECIMAL(10,2) GENERATED ALWAYS AS (quantity * price),
        FOREIGN KEY (orderId) REFERENCES orders(orderId),
        FOREIGN KEY (productId) REFERENCES products(productId)
);


--INSERT in USERS

INSERT INTO users (userId, name, phone, role)
VALUES (1, ‘Yameen’, ‘6362923206’, 'CUSTOMER');

--INSERT in PRODUCTS

INSERT INTO products (productId, name, description, price, quantity)
VALUES (‘1’,'FEVICOL', 'glue stick', 20.00, 100);
```

```sql
--INSERT in ORDERS

INSERT INTO orders (orderId, userId, totalPrice, status)
VALUES (ABC0000001, 1, 60.00, 'PENDING');



--INSERT in ORDERITEMS

INSERT INTO order_items (id, orderId, productId, quantity, price)
VALUES (1, ABC0000001, 1, 3, 60.0);
```