3.

Product: (productId, productName, price, amount)

Primary key is productId

Customer: (customerId, customerName)

Primary key is customerId

Purchase: (purchaseId, customerId, productId, amount)

Primary key is purchaseId

4.

CREATE TABLE Product (

ProductId int NOT NULL,

ProductName varchar(100),

Price float,

Amount int,

PRIMARY KEY (ProductId)

);

CREATE TABLE Customer (

CustomerId int NOT NULL,

CustomerName varchar(100),

PRIMARY KEY (CustomerId),

);

CREATE TABLE Purchase (

PurchaseId int NOT NULL,

CustomerId int NOT NULL,

ProductId int NOT NULL,

Amount int,

PRIMARY KEY (PurchaseId),

FOREIGN KEY (CustomerId) REFERENCES Customer(CustomerId),

FOREIGN KEY (ProductId) REFERENCES Product(ProductId),

);

5. INSERT INTO Product (productId , productName, price, amount)

   VALUES(1, ‘apple’, 2.0, 10), (2, ‘banana’, 3.0, 11), (3, ‘grape’, 3.0, 13), (4, ‘watermelon’, 4.0, 17), (5, ‘orange’, 4.0, 13);

  INSERT INTO Customer (customerId, customerName)

 VALUES(1, ‘QUAN’), (2, ‘ZHANG’), (3, ‘Bo’), (4, ‘Liu’), (5, ‘Qin’);

  INSERT INTO Purchase (purchaseId, customerId, productId, amount)

VALUES (1, 1, 1, 1), (2, 1, 2, 1), (3, 1, 3, 1), (4, 1, 4, 1), (5, 1, 5, 1), (6, 2, 1, 1), (7, 2, 2, 1), (8, 2, 3, 1), (9, 2, 4, 1), (10, 2, 5, 1);