CREATE TABLE Customer (

    CustomerID int NOT NULL PRIMARY KEY,

    Name varchar(255),

    Address varchar(255),

    CreditLimit int

);

CREATE TABLE Product(

ProductID int NOT NULL PRIMARY KEY,

    Name varchar(255),

Quantity int,

Price int

);

CREATE TABLE PurchaseOrder(

PurchaseOrderID int NOT NULL PRIMARY KEY,

CustomerID int FOREIGN KEY REFERENCES Customer(CustomerID),

PONumber varchar(255),

Date date DEFAULT GETDATE()

);

CREATE TABLE PurchasedItems(

PurchasedItemsID int,

PurchaseOrderID int FOREIGN KEY REFERENCES PurchaseOrder(PurchaseOrderID),

ProductID int FOREIGN KEY REFERENCES Product(ProductID),

CustomerID int FOREIGN KEY REFERENCES Customer(CustomerID)

);

INSERT INTO Customer VALUES (1, 'Jose', '417 Heflin Ave E', 100);

INSERT INTO Customer VALUES (2, 'Mo', 'Huntsville', 200);

INSERT INTO Customer VALUES (3, 'Moshine', 'Birmingham', 5);

INSERT INTO Product VALUES (1, ‘AppleWatch’, 10, 5);

INSERT INTO Product VALUES (2, ‘MacBook’, 5, 10);

INSERT INTO Product VALUES (3, ‘Mac’, 1, 100);

INSERT INTO Product VALUES (4, ‘Iphone X’, 20, 25);

INSERT INTO PurchaseOrder (PurchaseOrderID, CustomerID, PONumber) VALUES (1, 1, 'abcd1234');

INSERT INTO PurchaseOrder (PurchaseOrderID, CustomerID, PONumber) VALUES (2, 1, 'abbc1223');

INSERT INTO PurchaseOrder (PurchaseOrderID, CustomerID, PONumber) VALUES (3, 2, 'abcd1233');

INSERT INTO PurchaseOrder (PurchaseOrderID, CustomerID, PONumber) VALUES (4, 2, 'aacd1134');

INSERT INTO PurchaseOrder (PurchaseOrderID, CustomerID, PONumber) VALUES (5, 2, 'aaad1aa4');

INSERT INTO PurchaseOrder (PurchaseOrderID, CustomerID, PONumber) VALUES (6, 3, 'abbb1222');

INSERT INTO PurchasedItems VALUES (1, 1, 1, 1);

INSERT INTO PurchasedItems VALUES (2, 3, 2, 2);

INSERT INTO PurchasedItems VALUES (3, 4, 4, 3);

INSERT INTO PurchasedItems VALUES (4, 6, 1, 3);

// Create and execute a SELECT SQL statement.

String selectSql = "SELECT \* FROM dbo.Customer; ";

statement = connection.createStatement();

resultSet = statement.executeQuery(selectSql);

// Iterate through the result set and print the attributes.

while (resultSet.next()) {

System.out.println(resultSet.getString(2) + ", " +resultSet.getString(3) + ", " + resultSet.getString(4));

}

System.out.println(" " );

//Select all customer and selcte all product worth less than $20

selectSql = "SELECT \* FROM dbo.Product WHERE Price<20;";

statement = connection.createStatement();

resultSet = statement.executeQuery(selectSql);

System.out.println(" " );

// Iterate through the result set and print the attributes.

while (resultSet.next()) {

System.out.println("ID= " + resultSet.getString(1) + ", Quantity= " +resultSet.getString(2) + ", Price= " + resultSet.getString(3));

}

System.out.println(" " );

Scanner scanner = new Scanner(System.in);

System.out.print("Find all purchase orders related to user: ");

String name = scanner.next();

selectSql = "SELECT \* FROM dbo.PurchaseOrder WHERE dbo.PurchaseOrder.CustomerID = (SELECT dbo.Customer.CustomerID FROM dbo.Customer WHERE dbo.Customer.Name = '" + name + "');";

statement = connection.createStatement();

resultSet = statement.executeQuery(selectSql);

// Iterate through the result set and print the attributes.

while (resultSet.next()) {

System.out.println(resultSet.getString(1) + ", " +resultSet.getString(2) + ", " + resultSet.getString(3));

}

System.out.println(" " );

scanner = new Scanner(System.in);

System.out.print("Find all items realated to purchase order ID: ");

int POIDnumber = scanner.nextInt();

selectSql = "SELECT dbo.PurchasedItems.ProductID FROM dbo.PurchasedItems WHERE dbo.PurchasedItems.PurchaseOrderID =" + POIDnumber + ";";

statement = connection.createStatement();

resultSet = statement.executeQuery(selectSql);

System.out.println(String.format("List of items purchase base on purchase order ID: %s", POIDnumber));

// Iterate through the result set and print the attributes.

while (resultSet.next()) {

selectSql = "SELECT \* FROM dbo.Product WHERE ProductID ="+resultSet.getString(1) +";";

statement = connection.createStatement();

resultSet2 = statement.executeQuery(selectSql);

// Iterate through the result set and print the attributes.

while (resultSet2.next()) {

System.out.println(resultSet2.getString(1) + ", " +resultSet2.getString(2) + ", " + resultSet2.getString(3));

}

}

System.out.println(" " );

scanner = new Scanner(System.in);

System.out.print("Find all items realated to purchase order ID: ");

int PurchasedItemsIDNumber = scanner.nextInt();

selectSql = "SELECT dbo.Customer.Name FROM dbo.Customer WHERE dbo.Customer.CustomerID = (SELECT dbo.PurchasedItems.CustomerID FROM dbo.PurchasedItems WHERE dbo.PurchasedItems.PurchasedItemsID = "+ PurchasedItemsIDNumber + ");";

statement = connection.createStatement();

resultSet = statement.executeQuery(selectSql);

// Iterate through the result set and print the attributes.

while (resultSet.next()) {

System.out.println(resultSet.getString(1) );

}

System.out.println(" " );