Q. Develop a java program to do meaningful transaction using your DB

Main method:

```
package _221047012;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.util.Scanner;
//org.h2.Driver
//jdbc:h2:tcp://localhost/e:/MyDb/sachinproductdb
public class Main {
   static Connection connection;
   public static void main(String[] args)throws Exception {
      //uncomment only to create table
      //Class.forName("org.h2.Driver");//load the driver
      //Connection connection =
DriverManager.getConnection("jdbc:h2:tcp://localhost/e:/MyDb/sachinproductdb","sachin","#sunil@10")
;
    /*  String connectionUrl = "jdbc:sqlserver://172.16.51.44;" +
      "databaseName=221047012;integratedSecurity=false;user=Sahana;password=sahana$215";
      connection = DriverManager.getConnection(connectionUrl);
      String sql="create table Products"+"(PID integer,Productname varchar(100),Productunitprice
float,Quantities integer, PRIMARY KEY(PID))";
      PreparedStatement preparedStatement=connection.prepareStatement(sql);
      //Execute the query
      int n=preparedStatement.executeUpdate();
      if(n==1) {
         System.out.println("table not created");
      }
      else {
         System.out.println("table created");
      }
      preparedStatement.close();
      connection.close();*/



      Data p=new Data();
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter your choice 1.insert 2.delete 3.display");
      int  n1=sc.nextInt();
```

```
        if(n1==1) {
            p.insertvalues();
        }
        else if(n1==2) {
            p.deletevalues();
        }
        else if(n1==3) {
            p.displayval();
        }
    }
}
```

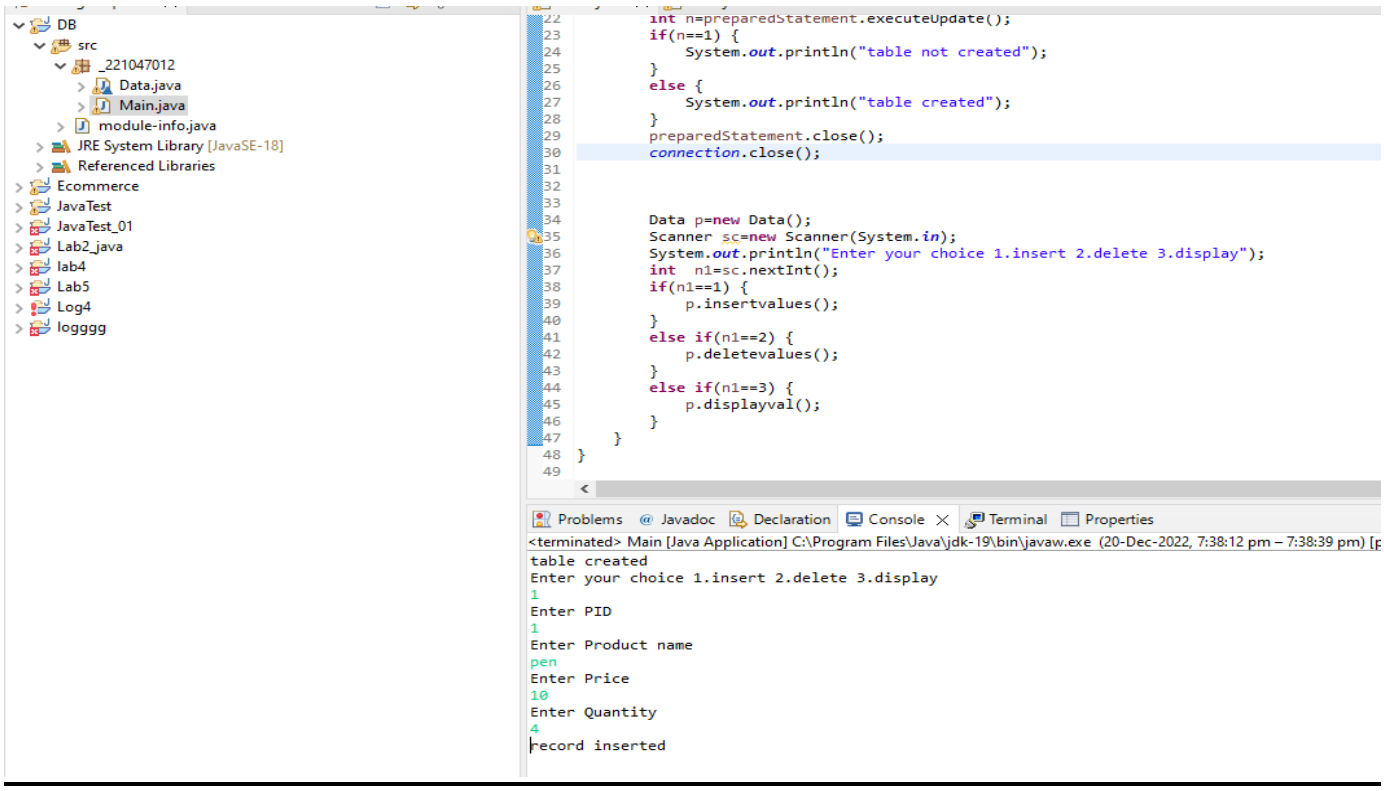
Operations:

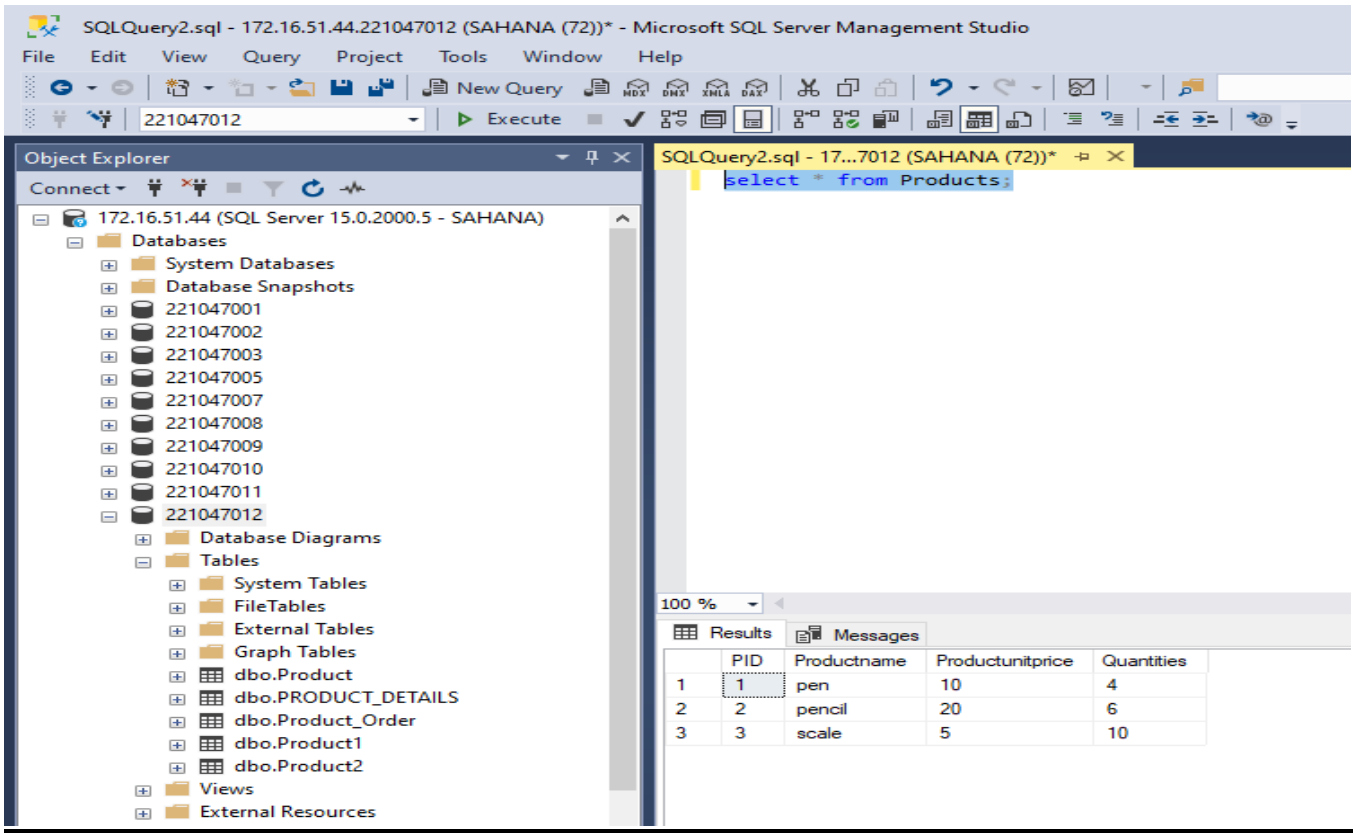
```
package _221047012;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Scanner;




class Data {
    static Connection connection;
void insertvalues() throws SQLException, ClassNotFoundException
{
    Scanner sc=new Scanner(System.in);
    /*Class.forName("jdbc:sqlserver://localhost:1433");//load the driver
    Connection connection =
DriverManager.getConnection("jdbc:h2:tcp://localhost/e:/MyDb/sachinproductdb","sachin","#sunil@10")
;*/
    String connectionUrl = "jdbc:sqlserver://172.16.51.44;" +
            "databaseName=221047012;integratedSecurity=false;user=Sahana;password=sahana$215";
    connection = DriverManager.getConnection(connectionUrl);
    String sql="insert into Products values (?,?,?,?)";
    PreparedStatement preparedStatement=connection.prepareStatement(sql);
    System.out.println("Enter PID");
    int pid=sc.nextInt();
    preparedStatement.setInt(1, pid);
    System.out.println("Enter Product name");
```

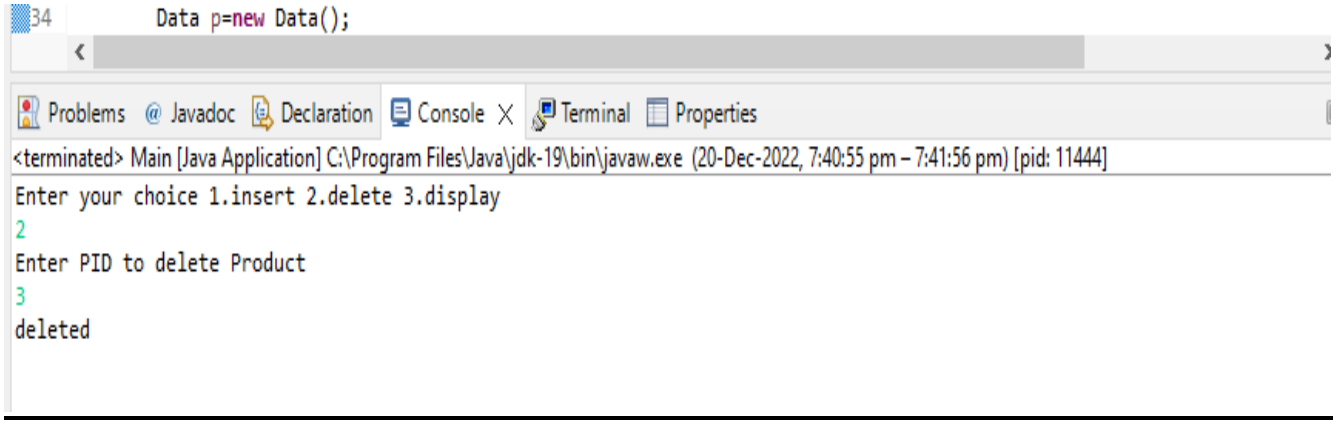
```
    String pname=sc.next();
    preparedStatement.setString(2,pname);
    System.out.println("Enter Price");
    float price=sc.nextFloat();
    preparedStatement.setFloat(3,price);
    System.out.println("Enter Quantity");
    int quantity=sc.nextInt();
    preparedStatement.setInt(4,quantity);
    //Execute the query
    int n=preparedStatement.executeUpdate();
    if(n==1) {
    System.out.println("record inserted");
    }
    else {
    System.out.println("record not inserted");
    }
    //closing
    preparedStatement.close();
    connection.close();
    }
void deletevalues() throws SQLException, ClassNotFoundException{
    Scanner sc=new Scanner(System.in);
    // TODO Auto-generated method stub
    //Class.forName("org.h2.Driver");//load the driver
    //make connection with DB
   // Connection connection =
DriverManager.getConnection("jdbc:h2:tcp://localhost/e:/MyDb/sachinproductdb","sachin","#sunil@10")
;
    String connectionUrl = "jdbc:sqlserver://172.16.51.44;" +
          "databaseName=221047012;integratedSecurity=false;user=Sahana;password=sahana$215";
    connection = DriverManager.getConnection(connectionUrl);
    String sql="Delete from Products where PID=?";
    PreparedStatement preparedStatement=connection.prepareStatement(sql);
    System.out.println("Enter PID to delete Product");
    int delpid=sc.nextInt();
    preparedStatement.setInt(1,delpid);
    int n=preparedStatement.executeUpdate();
    if(n==1) {
    System.out.println("deleted");
    }
    else {
       System.out.println("not deleted");
    }
    preparedStatement.close();
    connection.close();
}
void displayval() throws SQLException, ClassNotFoundException {
```

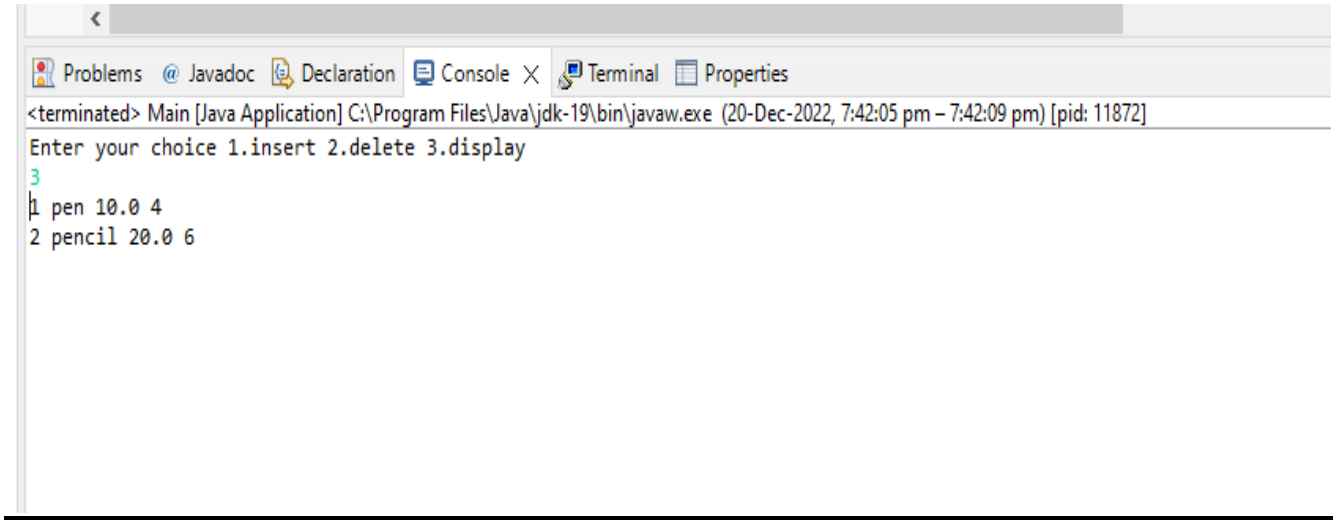
```
    Scanner sc=new Scanner(System.in);
    // TODO Auto-generated method stub
    //Class.forName("org.h2.Driver");//load the driver
    //make connection with DB
    //Connection connection =
DriverManager.getConnection("jdbc:h2:tcp://localhost/e:/MyDb/sachinproductdb","sachin","#sunil@10")
;
    String connectionUrl = "jdbc:sqlserver://172.16.51.44;" +
            "databaseName=221047012;integratedSecurity=false;user=Sahana;password=sahana$215";
    connection = DriverManager.getConnection(connectionUrl);
    String sql="Select * from Products";
    PreparedStatement preparedStatement=connection.prepareStatement(sql);
    ResultSet resultSet=preparedStatement.executeQuery();
    while(resultSet.next()) {
    System.out.println(resultSet.getInt("PID")+" "+resultSet.getString("Productname")+"
"+resultSet.getFloat("Productunitprice")+" "+resultSet.getInt("Quantities"));
    }
    resultSet.close();
    preparedStatement.close();
    connection.close();
    }
}
```

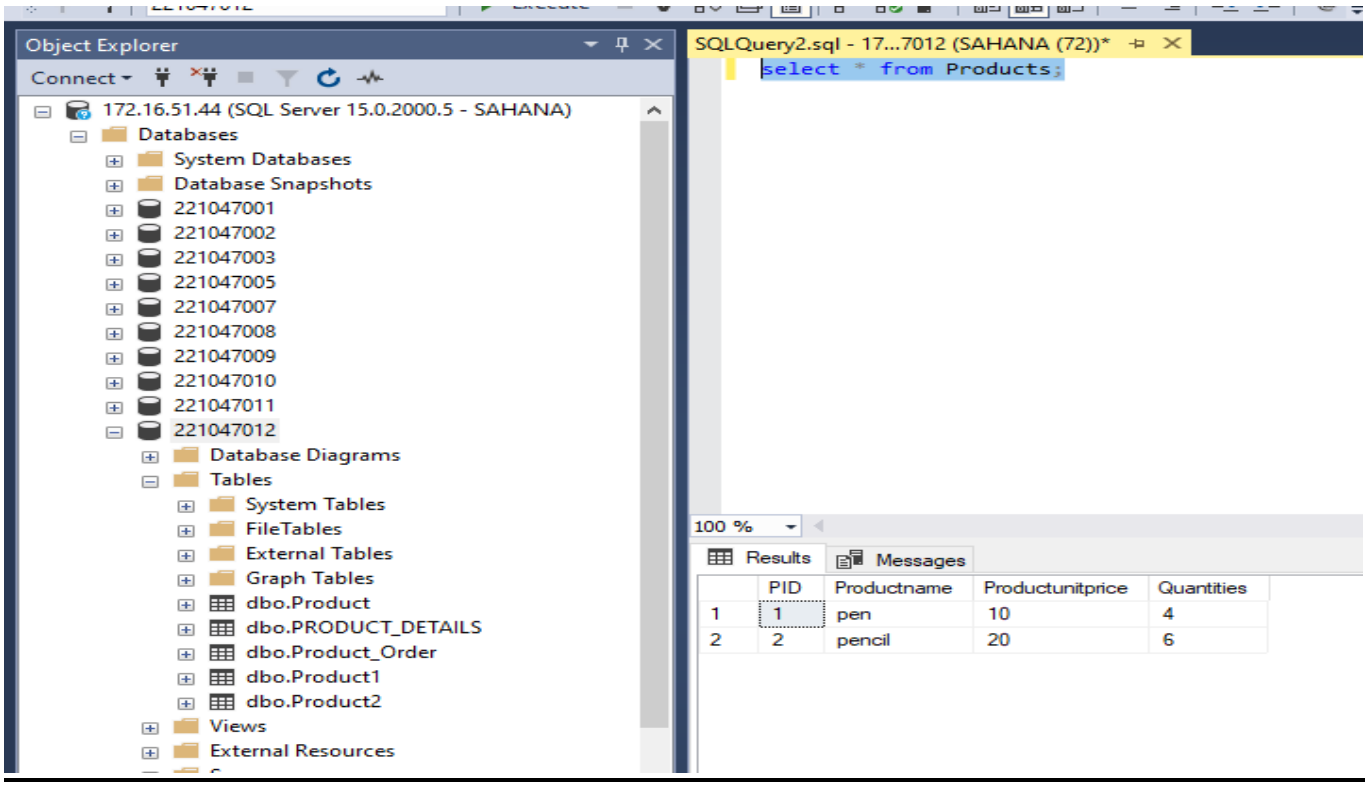
Snapshots:




SQLQuery2.sql - 172.16.51.44.221047012 (SAHANA (72))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
221047012
Object Explorer
Connect
172.16.51.44 (SQL Server 15.0.2000.5 - SAHANA)
Databases
System Databases
Database Snapshots
221047001
221047002
221047003
221047005
221047007
221047008
221047009
221047010
221047011
221047012
Database Diagrams
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.Product
dbo.PRODUCT_DETAILS
dbo.Product_Order
dbo.Product1
dbo.Product2
Views
External Resources
SQLQuery2.sql - 17...7012 (SAHANA (72))*
select * from Products;
100 %
Results
Messages
PID Productname Productunitprice Quantities
1 1 pen 10 4
2 2 pencil 20 6
3 3 scale 5 10


34 Data p=new Data();
Problems Javadoc Declaration Console Terminal Properties
<terminated> Main [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Dec-2022, 7:40:55 pm – 7:41:56 pm) [pid: 11444]
Enter your choice 1.insert 2.delete 3.display
2
Enter PID to delete Product
3
deleted


Problems Javadoc Declaration Console Terminal Properties
<terminated> Main [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Dec-2022, 7:42:05 pm – 7:42:09 pm) [pid: 11872]
Enter your choice 1.insert 2.delete 3.display
3
1 pen 10.0 4
2 pencil 20.0 6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dbo.Product
dbo.PRODUCT_DETAILS
dbo.Product_Order
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dbo.Product2
Views
External Resources
SQLQuery2.sql - 17...7012 (SAHANA (72))*
select * from Products;
100 %
Results
Messages
PID
Productname
Productunitprice
Quantities
1
1
pen
10
4
2
2
pencil
20
6