Dt : 7/11/2023

Program : DBCon4.java(Code Modified)

```java
package test;

import java.sql.*;

import java.util.*;

public class DBCon4 {

    public static void main(String[] args) {

    Scanner s = new Scanner(System.in);

    try(s;){

        try {

                Class.forName("oracle.jdbc.driver.OracleDriver");

        Connection con = DriverManager.getConnection

         ("jdbc:oracle:thin:@localhost:1521:xe",

                        "system","manager");

        PreparedStatement ps1 = con.prepareStatement

         ("insert into Product57 values(?,?,?,?)");//Compilation

        PreparedStatement ps2 = con.prepareStatement

                        ("select * from Product57");//Compilation

        PreparedStatement ps3 = con.prepareStatement

        ("select * from Product57 where code=?");//Compilation

        PreparedStatement ps4 = con.prepareStatement

        ("update Product57 set price=?,qty=qty+? where code=?");

        PreparedStatement ps5 = con.prepareStatement

        ("delete from Product57 where code=?");

        while(true)
```

```java
{
    System.out.println("****Choice*****");
    System.out.println("1.AddProduct"

                    + "\t\n2.ViewAllProducts"

                    + "\t\n3.ViewProductByCode"

                    + "\t\n4.UpdateProductByCode(price-qty)"

                    + "\t\n5.DeleteProductByCode"

                    + "\t\n6.Exit");
    System.out.println("Enter the Choice:");

    int choice = Integer.parseInt(s.nextLine());

    switch(choice)

    {

    case 1:

            System.out.println("====Enter Product Details===");

            System.out.println("Enter ProdCode:");

            String pC = s.nextLine();

            System.out.println("Enter ProdName:");

            String pN = s.nextLine();

            System.out.println("Enter ProdPrice:");

            float pP = Float.parseFloat(s.nextLine());

            System.out.println("Enter ProdQty:");

            int pQ = Integer.parseInt(s.nextLine());



            //Loading data to PreparedStatement Object
```

```java
                    ps1.setString(1, pC);

                    ps1.setString(2, pN);

                    ps1.setFloat(3, pP);

                    ps1.setInt(4, pQ);

                    int k = ps1.executeUpdate();//Execution

                    if(k>0) {

                            System.out.println("Product added Successfully..");

                    }

                    break;

            case 2:

                    ResultSet rs1 = ps2.executeQuery();//Execution

                    while(rs1.next())

                    {

                            System.out.println(rs1.getString(1)+"\t"+

                        rs1.getString(2)+"\t"+

                                            rs1.getFloat(3)+"\t"+

                            rs1.getInt(4));

                    }

                    break;

            case 3:

                    System.out.println("Enter the ProdCode:");

                    String pC1 = s.nextLine();

                    ps3.setString(1, pC1);

                    ResultSet rs2 = ps3.executeQuery();//Execution
```
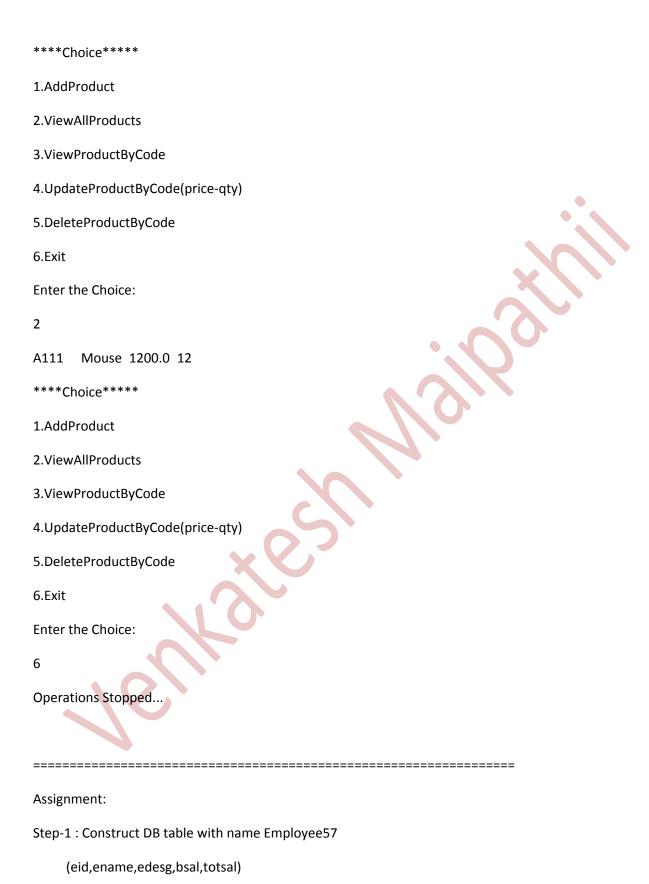
```java
            if(rs2.next()) {

                    System.out.println(rs2.getString(1)+"\t"+

                        rs2.getString(2)+"\t"+

                                        rs2.getFloat(3)+"\t"+

                        rs2.getInt(4));

            }else {

                    System.out.println("Invalid ProdCode...");

            }

            break;

        case 4:

            System.out.println("Enter the ProdCode for Updating:");

            String pC2 = s.nextLine();

            ps3.setString(1, pC2);

            ResultSet rs3 = ps3.executeQuery();

            if(rs3.next()) {

                    System.out.println("Old Price:"+rs3.getFloat(3));

                    System.out.println("Enter the New price:");

                    float nPrice = Float.parseFloat(s.nextLine());

                    System.out.println("Existing Qty:"+rs3.getInt(4));

                    System.out.println("Enter the New Qty:");

                    int nQty = Integer.parseInt(s.nextLine());

                    ps4.setFloat(1, nPrice);

                    ps4.setInt(2, nQty);

                    ps4.setString(3, pC2);

                    int k2 = ps4.executeUpdate();
```

```java
                    if(k2>0) {

                            System.out.println("Product Updated Successfully...");

                    }

            }else {

                    System.out.println("Invalid ProdCode...");

            }

            break;

    case 5:

            System.out.println("Enter the ProCode for delete process:");

            String pC3 = s.nextLine();

            ps3.setString(1, pC3);

            ResultSet rs4 = ps3.executeQuery();

            if(rs4.next()) {

                    ps5.setString(1, pC3);

                    int k4 = ps5.executeUpdate();

                    if(k4>0) {

                            System.out.println("Product deleted Successfully...");

                    }

            }else {

                    System.out.println("Invalid ProdCode...");

            }

            break;

    case 6:

            System.out.println("Operations Stopped...");

            System.exit(0);
```

```
                    default:

                            System.out.println("Invalid Choice...");

                    }//end of switch

            }//end of loop

              }//end of try

              catch(Exception e)

              {

                    e.printStackTrace();

              }

        }//end of try with resource

            }

}
```

o/p:

****Choice*****

1.AddProduct

2.ViewAllProducts

3.ViewProductByCode

4.UpdateProductByCode(price-qty)

5.DeleteProductByCode

6.Exit

Enter the Choice:

5

Enter the ProCode for delete process:

A222

Product deleted Successfully...

****Choice*****

1.AddProduct

2.ViewAllProducts

3.ViewProductByCode

4.UpdateProductByCode(price-qty)

5.DeleteProductByCode

6.Exit

Enter the Choice:

2

A111   Mouse 1200.0 12

****Choice*****

1.AddProduct

2.ViewAllProducts

3.ViewProductByCode

4.UpdateProductByCode(price-qty)

5.DeleteProductByCode

6.Exit

Enter the Choice:

6

Operations Stopped...

==

Assignment:

Step-1 : Construct DB table with name Employee57

      (eid,ename,edesg,bsal,totsal)

primary key : eid

step-2 : Construct JDBC Application to perform the following operations:

    1.AddEmployee

    2.ViewAllEmployees

    3.ViewEmployeeById

    4.UpdateEmployeeById(bSal)

    5.DeleteEmployeeById

Note:

totSal = bSal+hra+da;

hra = 93% of bSal

da = 61% of bSal

===