
Program to insert, update, delete, select data from the oracle database tables using type 4 driver

Server Program

```
import java.io.*;
import java.net.*;
import java.sql.*;
public class DBServer
{
    static Connection con;
    static Statement st1,st2;
    static ResultSet rs1;
    static ServerSocket ss=null;
    static Socket s=null;
    public static void main(String args[])
    {
        try
        {
            DriverManager.registerDriver(new oracle.jdbc.driver.OracleDriver());
            con=DriverManager.getConnection("jdbc:oracle:thin:@172.16.4.100:1521:ora9","scott","tiger");
            st1=con.createStatement();
            System.out.println("Done");
        }
        catch(Exception e) { System.out.println("Error establishing connection : "+e); }
        try
        {
            ss=new ServerSocket(1090);
            System.out.println("Server");
            s=ss.accept();
            BufferedReader in= new BufferedReader(new InputStreamReader(s.getInputStream()));
            PrintWriter out=new PrintWriter(s.getOutputStream(),true);
            out.println("Welcome to DBServer");
            while(true)
            {
                int choice=Integer.parseInt(in.readLine());
                String usr=null,pass=null;
                int c=0;
                switch(choice)
                {
                    case 1 : usr=in.readLine();
                        pass=in.readLine();
                        c=st1.executeUpdate("insert into userinfo values('"+usr+"','"+pass+"')");
                        if(c==1)out.println("Data inserted successfully");
                        break;
                    case 2 : usr=in.readLine();
                        pass=in.readLine();
                        System.out.println("username='"+usr+"\\tpassword='"+pass);
                        rs1=st1.executeQuery("select * from userinfo where userid='"+usr+"'");
                        while(rs1.next())
                        {
```

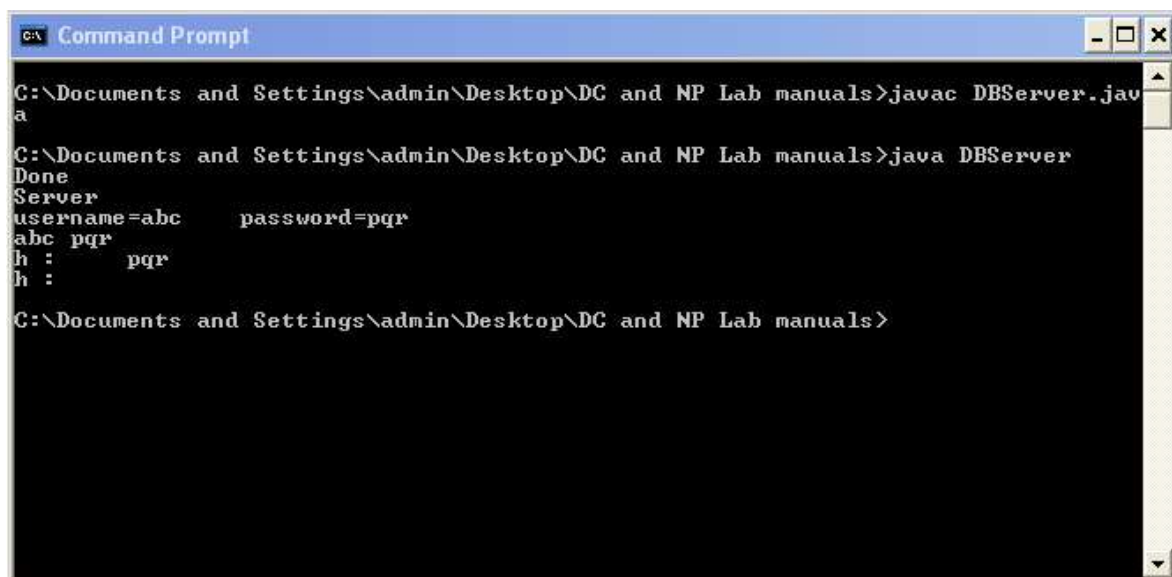
```

        c=st1.executeUpdate("update userinfo set password='"+pass+"' where
userid='"+usr+"'");
    }
    if(c==1)
        out.println("password updated for the given username");
    else
        out.println("update not possible");
    break;
case 3: usr=in.readLine();
        String res="";
        rs1=st1.executeQuery("select * from userinfo where userid='"+usr+"'");
        while(rs1.next())
        {
            System.out.println(rs1.getString(1)+" "+rs1.getString(2));
            res=res+"\t"+rs1.getString(2);
        }
        System.out.println("h : "+res);
        out.println(res);
        break;
case 4 : usr=in.readLine();
        c=st1.executeUpdate("delete userinfo where userid='"+usr+"'");
        if(c>=1) out.println("userinformation for the following userid '"+usr+"' is deleted");
        else
            out.println("user does not exists");
        break;

default :      break;
} } }
catch(Exception e) {}
} }

```

OUTPUT – SERVER



```

C:\Documents and Settings\admin\Desktop\DC and NP Lab manuals>javac DBServer.java
C:\Documents and Settings\admin\Desktop\DC and NP Lab manuals>java DBServer
Done
Server
username=abc    password=pqr
abc pqr
h :            pqr
h :
C:\Documents and Settings\admin\Desktop\DC and NP Lab manuals>

```

Client Program

```
import java.io.*;
import java.net.*;
public class DBClient
{
    static Socket cs=null;
    public static void main(String args[])throws IOException
    {
        try
        {
            cs=new Socket("localhost",1090);
        }
        catch(Exception e)
        {}
        System.out.println("Enter the code");
        BufferedReader stdin=new BufferedReader(new InputStreamReader(System.in));
        BufferedReader in=new BufferedReader(new InputStreamReader(cs.getInputStream()));
        PrintWriter out=new PrintWriter(cs.getOutputStream(),true);
        System.out.println(in.readLine());
        String user=null,pass=null;
        while(true)
        {
            System.out.println("commands : 1:insert 2: update 3: select 4: delete 5:exit");
            int choice=Integer.parseInt(stdin.readLine());
            switch(choice)
            {
                case 1: System.out.println("Enter username and password to be inserted");
                    user=stdin.readLine();
                    pass=stdin.readLine();
                    out.println("1");
                    out.println(user);
                    out.println(pass);
                    System.out.println(in.readLine());
                    break;
                case 2 : System.out.println("Enter username and new password to be update");
                    user=stdin.readLine();
                    pass=stdin.readLine();
                    out.println("2");
                    out.println(user);
                    out.println(pass);
                    System.out.println(in.readLine());
                    break;
                case 3 : System.out.println("enter username whose password is needed");
                    user=stdin.readLine();
                    out.println("3");
                    out.println(user);

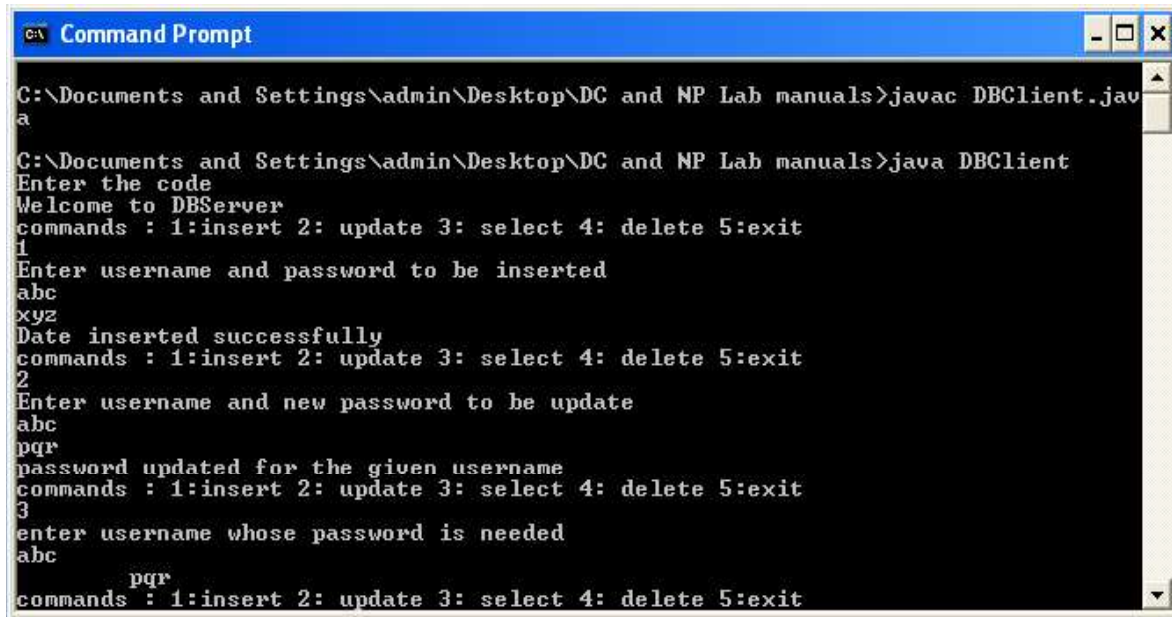
                    System.out.println(in.readLine());
                    break;
```

```

case 4 : System.out.println("enter username for person whose details has to be deleted ");
        user=stdin.readLine();
        out.println("4");
        out.println(user);
        System.out.println(in.readLine());
        break;
case 5 : System.exit(1);
default : break;
} } } }

```

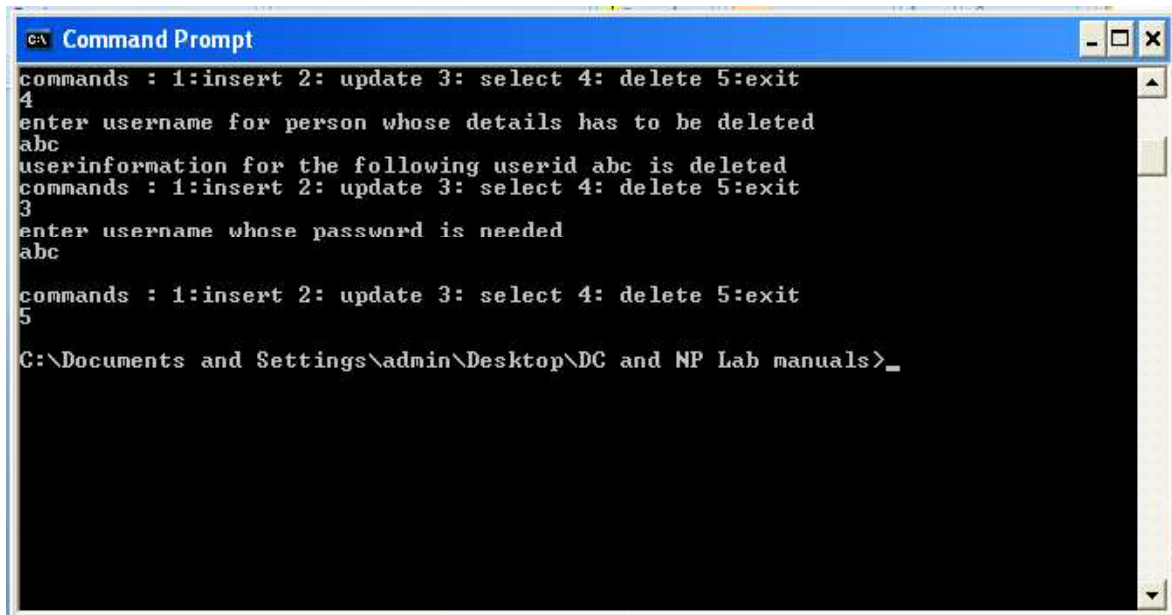
OUTPUT – CLIENT



```

C:\Documents and Settings\admin\Desktop\DC and NP Lab manuals>javac DBClient.java
C:\Documents and Settings\admin\Desktop\DC and NP Lab manuals>java DBClient
Enter the code
Welcome to DBServer
commands : 1:insert 2: update 3: select 4: delete 5:exit
1
Enter username and password to be inserted
abc
xyz
Date inserted successfully
commands : 1:insert 2: update 3: select 4: delete 5:exit
2
Enter username and new password to be update
abc
pqr
password updated for the given username
commands : 1:insert 2: update 3: select 4: delete 5:exit
3
enter username whose password is needed
abc
pqr
commands : 1:insert 2: update 3: select 4: delete 5:exit

```



```

commands : 1:insert 2: update 3: select 4: delete 5:exit
4
enter username for person whose details has to be deleted
abc
userinformation for the following userid abc is deleted
commands : 1:insert 2: update 3: select 4: delete 5:exit
3
enter username whose password is needed
abc
commands : 1:insert 2: update 3: select 4: delete 5:exit
5
C:\Documents and Settings\admin\Desktop\DC and NP Lab manuals>_

```