TITLE: ATM SYSTEM (SJ ATM)

AIM: TO DEMONSTRATE WORKING OF ATM.

THEORY:

We Have made this project to demonstrate working of an ATM. In this Project we Have Made use of NETBEANS IDE and MySQL DATABASE.

********************IMPORT STATEMENTS USED IN PROJECT*****************

import java.awt.event.*;

It defines classes and interfaces used for **event handling in the **AWT** and Swing.**

import java.sql.Connection;

To set up a **connection to a database**

import java.sql.DriverManager;

** Establishes a connection from the given database URL, user and password.**

import java.sql.PreparedStatement;

** It is used to execute parameterized query.**

import java.sql.ResultSet;

**A ResultSet is a way to store and manipulate the records returned from a SQL query. **

import java.sql.Statement;

** allow you to execute basic SQL queries and retrieve the results through the ResultSet class**

import javax.swing.JOptionPane;

It is a component which provides standard methods to pop up a standard dialog box for a value or informs the user of something.

import java.awt.Toolkit;

** used to bind various components**

import javax.swing.table.DefaultTableModel;

** The DefaultTableModel stores the data for the JTable in a Vector of Vectors.**

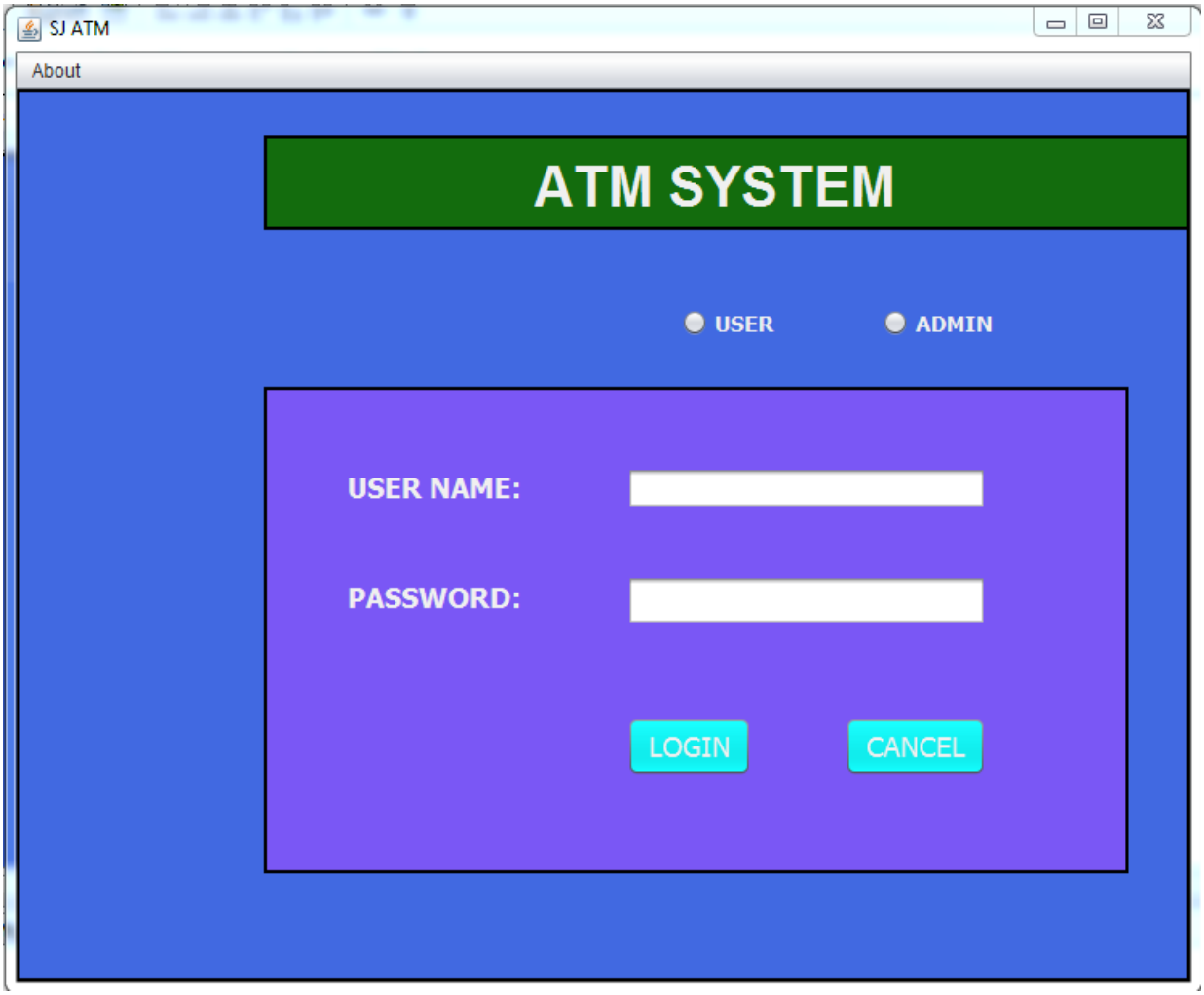
**********ABOUT MySQL DATABASE**********

A **database** is an organized collection of data. A relational database, on the other hand, is a collection of schemas, tables, queries, reports, views, and other elements.

A **database-management system** (**DBMS**) is a computer-software application that interacts with end-users, other applications, and the database itself to capture and analyze data. A general-purpose DBMS allows the definition, creation, querying, update, and administration of databases. Well-known DBMSs include MySQL.

MySQL is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL). SQL is the most popular language for adding, accessing and managing content in a database. It is most noted for its quick processing, proven reliability, ease and flexibility of use.

PROGRAM AND OUTPUT:



public class ATM_System extends javax.swing.JFrame {

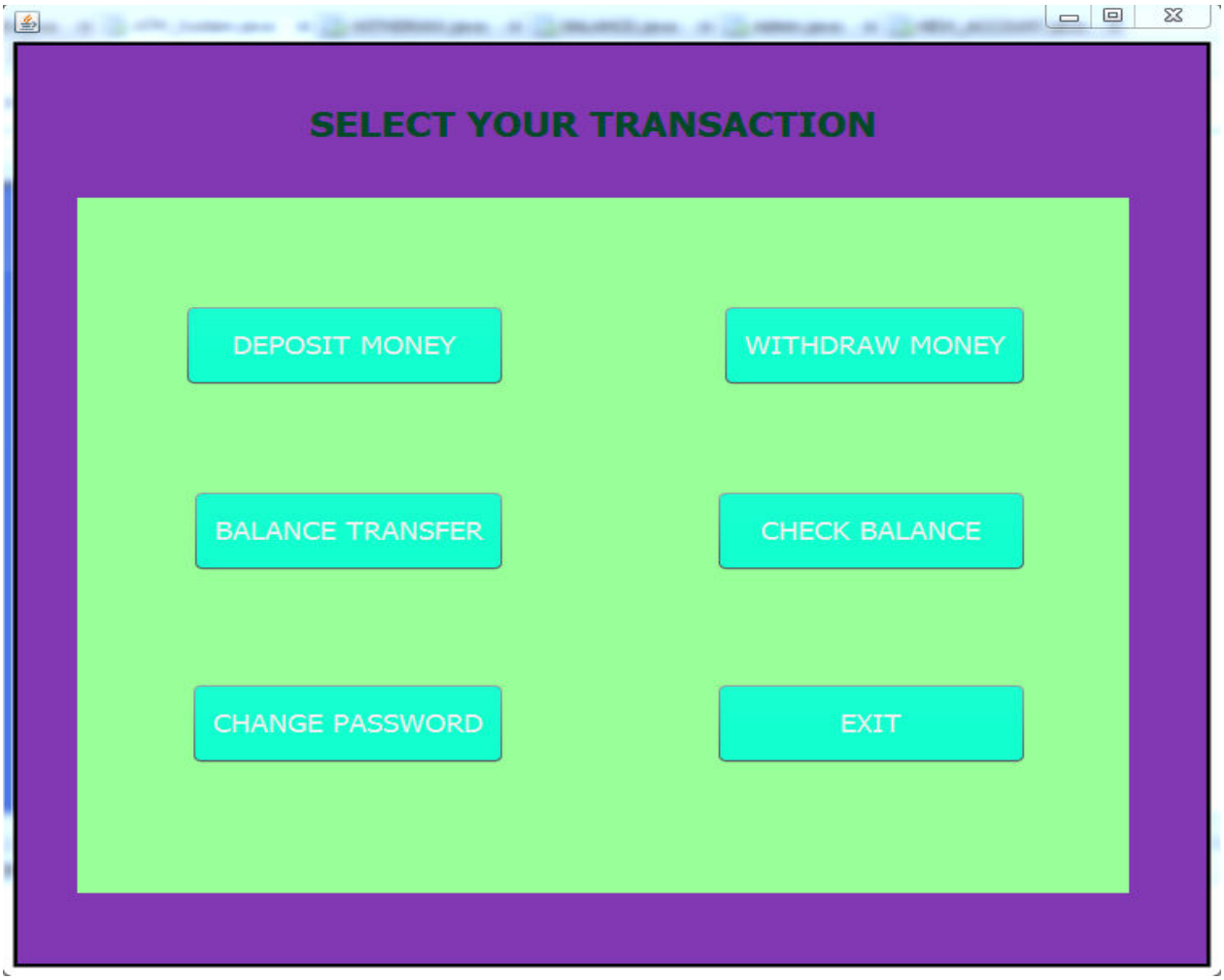
```
  public ATM_System() {
     initComponents();
  }
 Statement stmt = null;
  ResultSet rs = null;
```

```
private void btn_loginActionPerformed(java.awt.event.ActionEvent evt) {
      String userid=jTextField1.getText();
      String password=new String(jpassword.getPassword());


       if(userid.isEmpty() && password.isEmpty())
          {
             JOptionPane.showMessageDialog(null,"ENTER YOUR USER NAME and
Password");
          }
          else if(userid.isEmpty() )
          {
             JOptionPane.showMessageDialog(null,"ENTER YOUR USER NAME ");
          }
          else if( password.isEmpty())
          {
             JOptionPane.showMessageDialog(null,"ENTER YOUR Password");
          }
          else
          {
            if(jRadioButton1.isSelected())
             {
         try {
          Class.forName("com.mysql.jdbc.Driver");
          Connection con = (Connection)
```

```
DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");


          String SQL = "SELECT * FROM details WHERE username like
'%"+(userid)+"%'";
         stmt = con.createStatement();
          rs = stmt.executeQuery(SQL);


            if (rs.next()!= rs.isAfterLast()) {
            String cID = rs.getString("id");
            String cuser = rs.getString("username");
            String cpass = rs.getString("password");
            String cemail = rs.getString("email");
            String cAdd = rs.getString("address");
            String cPh = rs.getString("mob_no");
            String cbal = rs.getString("balance");
                  if(userid.equals(cuser)  &&  password.equals(cpass)
             {
                 JOptionPane.showMessageDialog(null,"LOGIN SUCCESSFULLY");
                  AFTERLOGIN f1=new AFTERLOGIN(password);
                              f1.setVisible(true);
                  }
                   else
                  {
```

```
            JOptionPane.showMessageDialog(null,"WRONG USERNAME AND
PASSWORD");
                  }
             }
          else
             JOptionPane.showMessageDialog(null," "+userid+" DOESN'T EXIST ");
       }
          catch (Exception e) {
               JOptionPane.showMessageDialog(null, e.getMessage()+"EROR 404");
             }
          }
       else
       {
          if("admin".equals(userid) && "admin".equals(password))
          {
             JOptionPane.showMessageDialog(null,"LOGIN SUCCESSFULLY");

          Admin a = new Admin();
          a.setVisible(true);
          }
          else
          {
             JOptionPane.showMessageDialog(null,"INVALID CREDENTIALS");
          }
       }
```

```
    }


  }
 private void btn_cancelActionPerformed(java.awt.event.ActionEvent evt) {
    int YESorNO=JOptionPane.showConfirmDialog(null,"Do You Really Want To
CanCel ","CANCEL",JOptionPane.YES_NO_OPTION);
    if (YESorNO==0){
       System.exit(0);
    }
  }
  public void close() {
    WindowEvent winClosingEvent=new
WindowEvent(this,WindowEvent.WINDOW_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(winClosingEvent);
    }


public static void main(String args[]) {
    java.awt.EventQueue.invokeLater(new Runnable() {
       public void run() {
          new ATM_System().setVisible(true);
       }


  }
```

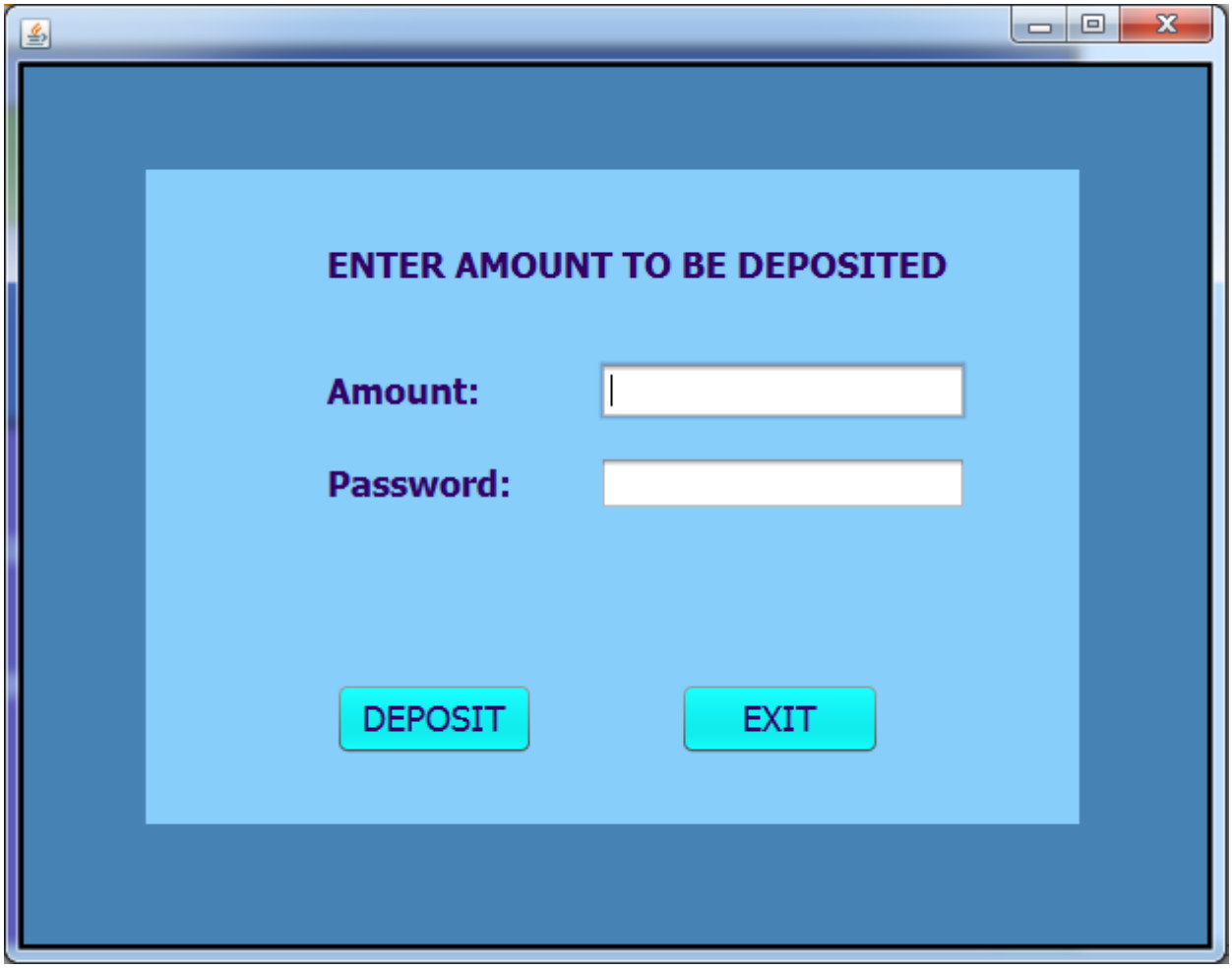


public class AFTERLOGIN extends javax.swing.JFrame {

```
    public AFTERLOGIN() {
        initComponents();

    }
    String pass;
   public AFTERLOGIN(String p)
   {
```

```
        initComponents();
        pass=p;

    }
private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {
        close();
        WITHDRAW w = new WITHDRAW(pass);
         w.setVisible(true);

    }
private void jexitActionPerformed(java.awt.event.ActionEvent evt) {
         int YESorNO=JOptionPane.showConfirmDialog(null,"Do You Really Want To
Exit","Exit",JOptionPane.YES_NO_OPTION);
         if (YESorNO==0){
            System.exit(0);
         }

    }

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        close();
        CHANGEPIN cp=new CHANGEPIN();
        cp.setVisible(true);
    }
```

```
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
        //close();
        BALANCE b=new BALANCE(pass);
        b.setVisible(true);
    }

    private void jdepositeActionPerformed(java.awt.event.ActionEvent evt) {
        close();
        DEPOSIT d=new DEPOSIT();
        d.setVisible(true);

    }
public static void main(String args[]) {

        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new AFTERLOGIN().setVisible(true);
            }
    }
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
close();
        BALANCETRANSFER bt=new BALANCETRANSFER(pass);
        bt.setVisible(true);
        }
```




```
public class DEPOSIT extends javax.swing.JFrame {
public DEPOSIT() {
        initComponents();
    }
Statement stmt = null;
    ResultSet rs = null;
```

```
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
       int YESorNO=JOptionPane.showConfirmDialog(null,"Do You Really Want To
Exit","Exit",JOptionPane.YES_NO_OPTION);
      if (YESorNO==0){
        close();
        ATM_System al = new ATM_System();
        al.setVisible(true);
      }
   }

private void jdepositeActionPerformed(java.awt.event.ActionEvent evt) {
      int amount=Integer.parseInt(jTextField1.getText());
      String pass=new String(jpassword.getPassword());

      if(amount>=50000)
      {
         JOptionPane.showMessageDialog(null,"DEPOSITE AMOUNT IS GREATER
THAN 50000 ENTER AMOUNT LESS THAN 50000");
      }
      else{
         try{
         Class.forName("com.mysql.jdbc.Driver");
         Connection con = (Connection)

DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");
```

```
        Statement stmt = null;
        ResultSet rs = null;

         String SQL = "SELECT * FROM details WHERE password like
'%"+(pass)+"%'";
          stmt = con.createStatement();
         rs = stmt.executeQuery(SQL);

           if (rs.next()!= rs.isAfterLast()) {
           String cID = rs.getString("id");
           String cuser = rs.getString("username");
           String cpass = rs.getString("password");
           String cemail = rs.getString("email");
           String cAdd = rs.getString("address");
           String cPh = rs.getString("mob_no");
           //String cbal = rs.getString("balance");
           int cbal = Integer.parseInt(rs.getNString("balance"));
            if(cpass.equals(pass))
            {
                  int temp=cbal+amount;

                  System.out.println(temp);

        String SQL1 = "SELECT * FROM details";
        stmt = con.createStatement();
```

```
        rs = stmt.executeQuery(SQL1);
        String strSQL = "Update details set balance = "+(temp)+" where password =
" + (pass);
        int rowsEffected = stmt.executeUpdate(strSQL);
        if (rowsEffected == 0){
           JOptionPane.showMessageDialog(this, "Amount Is Not Deposited ");
        }
        else{
            JOptionPane.showMessageDialog(this,"AMOUNT IS DEPOSITED
Successfully");
        }
           }
        con.close();
        stmt.close();
        rs.close();
           }
}
        catch(Exception e){
            JOptionPane.showMessageDialog(this, e.getMessage());
     }
      }
  }
```

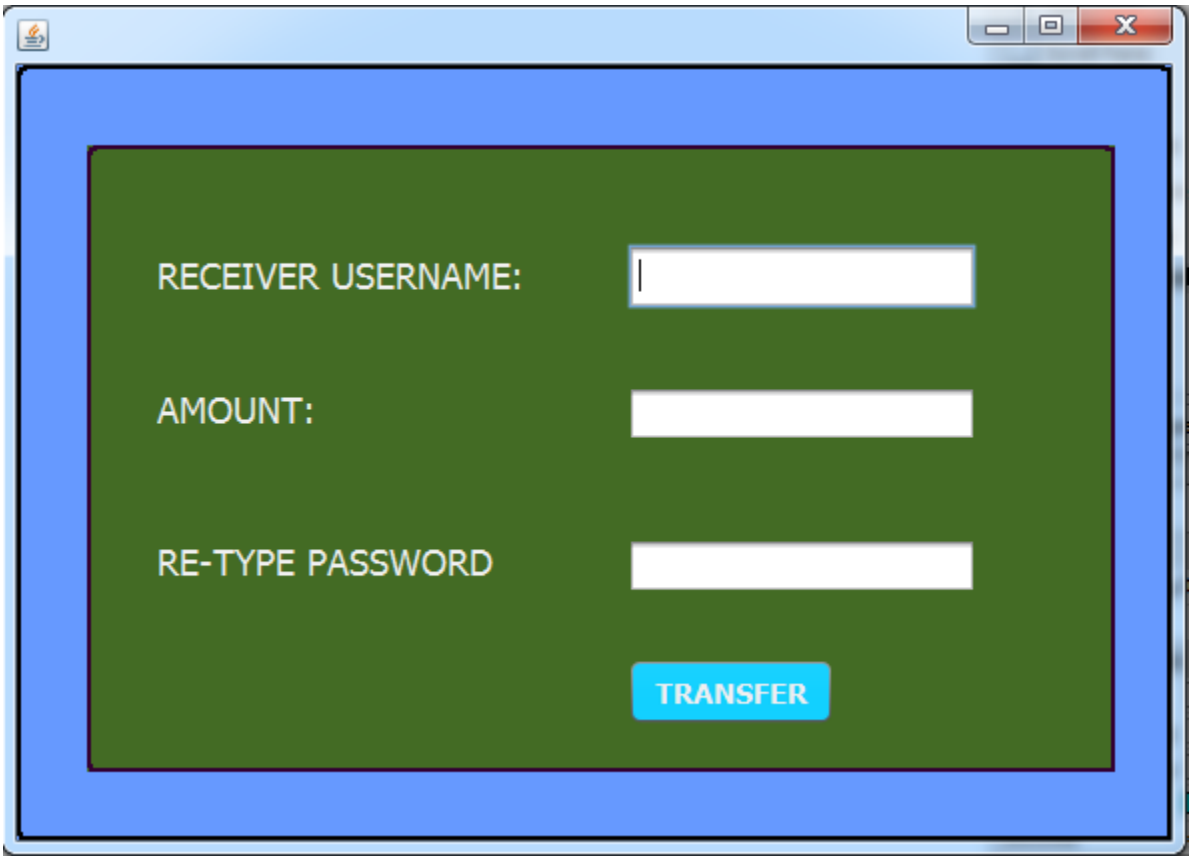
```
private void close() {
      WindowEvent winClosingEvent=new
WindowEvent(this,WindowEvent.WINDOW_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(winClosingEvent);
   }

public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
           new DEPOSIT().setVisible(true);
        }
   }
```


```
public class WITHDRAW extends javax.swing.JFrame {
    public WITHDRAW() {
        initComponents();
    }
    String pass;
    public WITHDRAW(String p)
    {
        initComponents();
        pass=p;
    }
```

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {


        int amount=Integer.parseInt(jTextField1.getText());


       if(amount>=100000)
       {
          JOptionPane.showMessageDialog(null,"YOU CAN'T WITHDRAW MORE
THAN 50000");
       }
       else{
          try{
          Class.forName("com.mysql.jdbc.Driver");
          Connection con = (Connection)

DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");
          Statement stmt = null;
          ResultSet rs = null;
           String SQL = "SELECT * FROM details WHERE password like
'%"+(pass)+"%'";
         stmt = con.createStatement();
           rs = stmt.executeQuery(SQL);
             if (rs.next()!= rs.isAfterLast()) {
             String cpass = rs.getString("password");
             int cbal = Integer.parseInt(rs.getNString("balance"));
              if(cbal>amount)
```

```
            {
                int temp=cbal-amount;

                System.out.println(temp);

        String SQL1 = "SELECT * FROM details";
        stmt = con.createStatement();
        rs = stmt.executeQuery(SQL1);
        String strSQL = "Update details set balance = "+(temp)+" where password =
" + (pass);
        int rowsEffected = stmt.executeUpdate(strSQL);
        if (rowsEffected == 0){
           JOptionPane.showMessageDialog(this, "Transaction Not Successfull ");
        }
        else{
            JOptionPane.showMessageDialog(this,"TRANSACTION Successfull");
        }
      }
            else{
               JOptionPane.showMessageDialog(this,"Insufficient Balance");
            }
        con.close();
        stmt.close();
        rs.close();
         }
```

```
 }
        catch(Exception e){
             JOptionPane.showMessageDialog(this, e.getMessage());
        }
      }
   }
public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
           new WITHDRAW().setVisible(true);
        }
   }
```

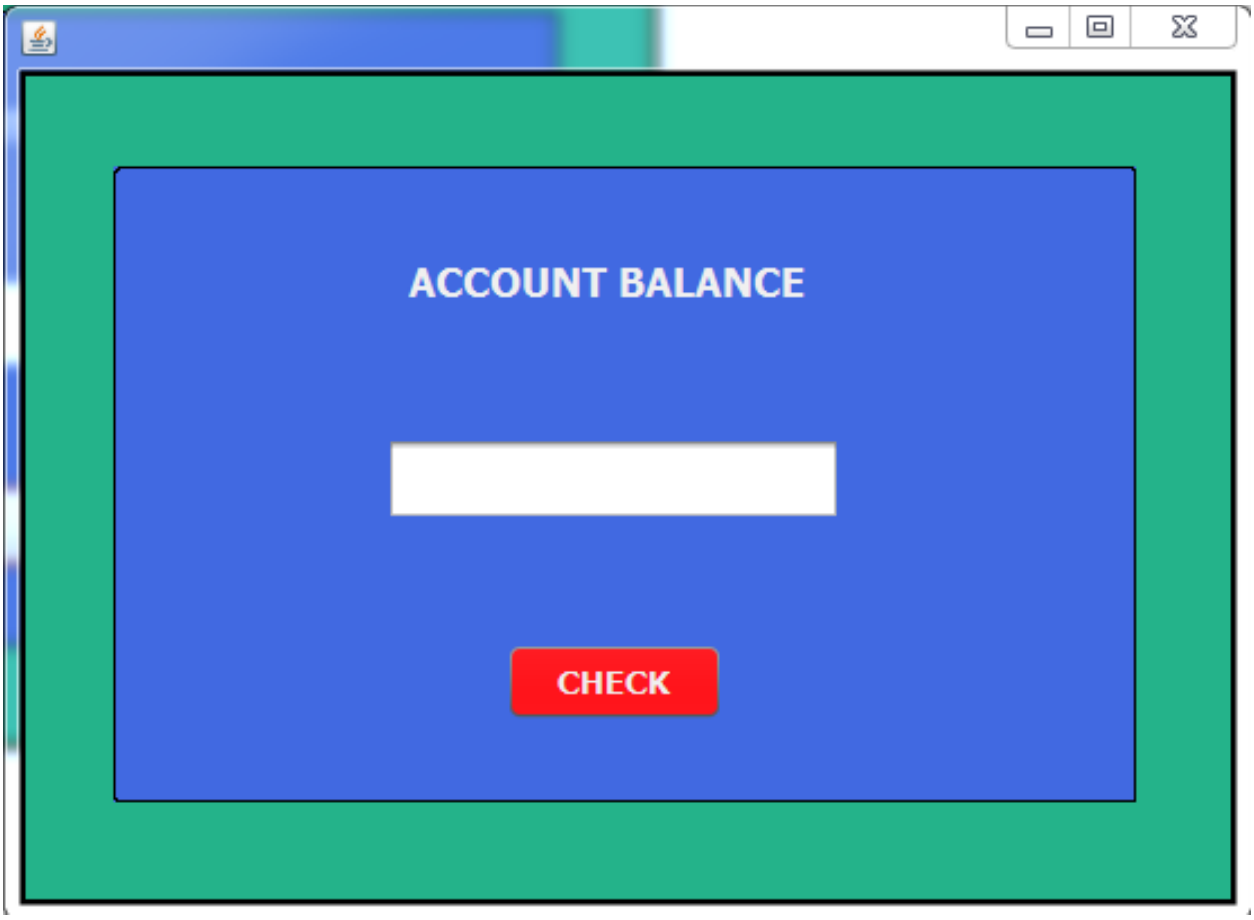


public class BALANCE extends javax.swing.JFrame {

```
public BALANCE() {
        initComponents();
    }
    String pass;
     public BALANCE(String p)
     {
         initComponents();
          pass=p;
     }
```

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {



      try{
         Class.forName("com.mysql.jdbc.Driver");
         Connection con = (Connection)

DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");
         Statement stmt = null;
         ResultSet rs = null;


          String SQL = "SELECT * FROM details WHERE password like
'%"+(pass)+"%'";
          stmt = con.createStatement();
          rs = stmt.executeQuery(SQL);


            if (rs.next()!= rs.isAfterLast()) {
           String cpass = rs.getString("password");
           String cbal = rs.getString("balance");
               if(cpass.equals(pass))
               {
                  jTextField1.setText(cbal);
               }
```

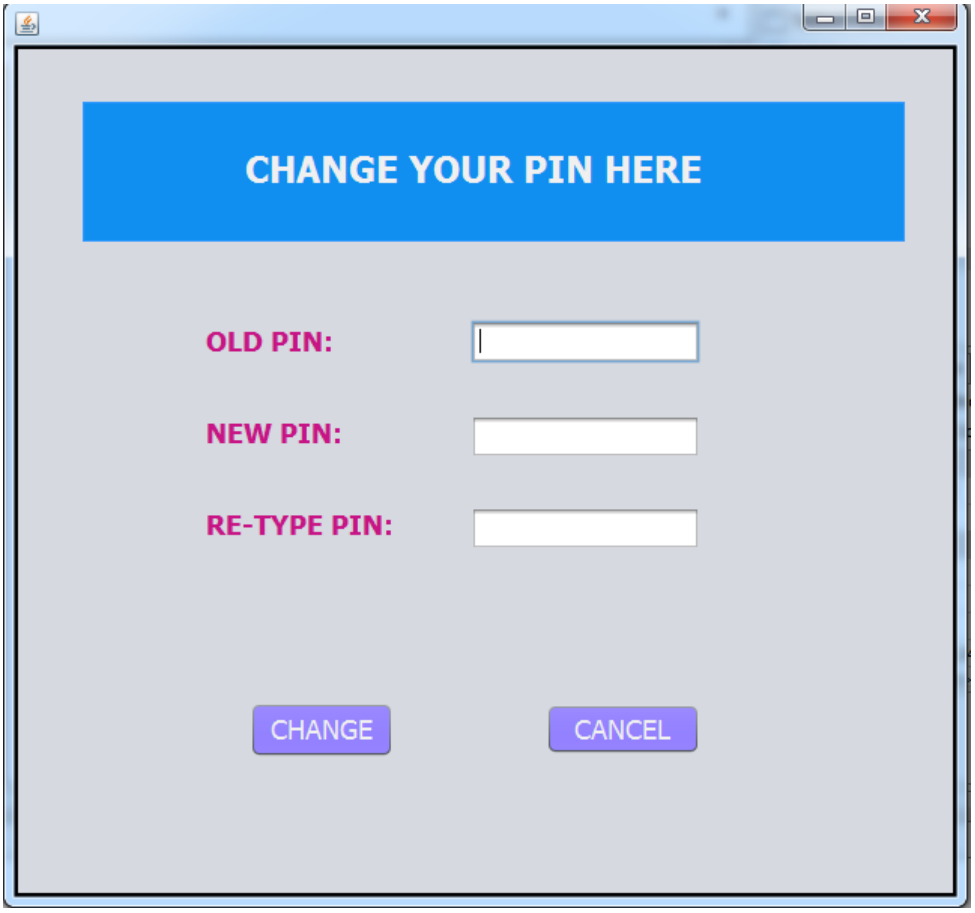
```
            }
        }
        catch(Exception e){
            JOptionPane.showMessageDialog(this, e.getMessage());


        }


}
public static void main(String args[]) {
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new BALANCE().setVisible(true);
        }
}
```




```
public class BALANCE extends javax.swing.JFrame {
public BALANCE() {
       initComponents();
   }
   String pass;
    public BALANCE(String p)
    {
       initComponents();
        pass=p;
    }
```

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {



      try{
         Class.forName("com.mysql.jdbc.Driver");
         Connection con = (Connection)

DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");
         Statement stmt = null;
         ResultSet rs = null;


          String SQL = "SELECT * FROM details WHERE password like
'%"+(pass)+"%'";
          stmt = con.createStatement();
          rs = stmt.executeQuery(SQL);


            if (rs.next()!= rs.isAfterLast()) {
           String cpass = rs.getString("password");
           String cbal = rs.getString("balance");
              if(cpass.equals(pass))
               {
                  jTextField1.setText(cbal);
               }
           }
         }
```

```
        catch(Exception e){
           JOptionPane.showMessageDialog(this, e.getMessage());

        }

   }
public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
           new BALANCE().setVisible(true);
        }
   }
```



public class CHANGEPIN extends javax.swing.JFrame {

```
    public CHANGEPIN() {
     initComponents();
  }
```

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

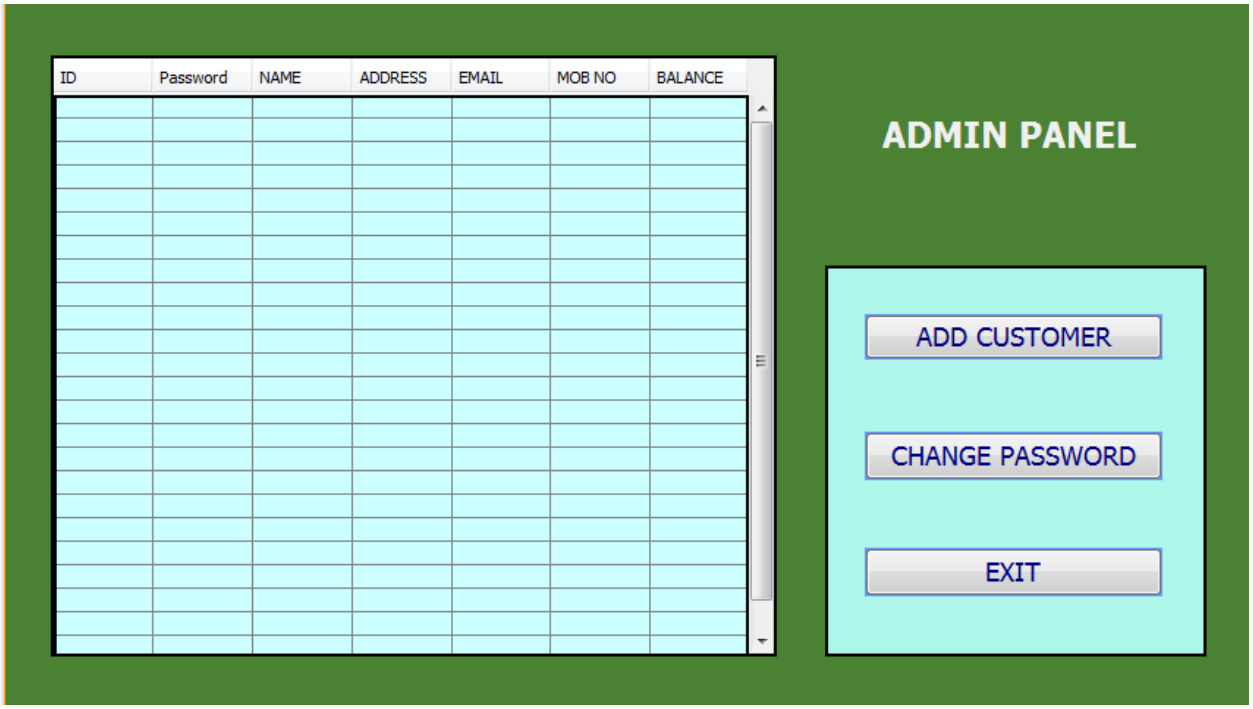
```
     int YESorNO=JOptionPane.showConfirmDialog(null,"Do You Really Want To CanCel Transaction","CANCEL",JOptionPane.YES_NO_OPTION);
     if (YESorNO==0){
```

```
        close();
        AFTERLOGIN al = new AFTERLOGIN();
        al.setVisible(true);
}
 }

  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
     String old_pass=new String(jPasswordField1.getPassword());
     String new_pass=new String(jPasswordField2.getPassword());
     String re_new_pass=new String(jPasswordField3.getPassword());

     if(old_pass.isEmpty())
     {
         JOptionPane.showMessageDialog(this,"ENTER OLD PASSWORD");
     }
     else if(new_pass.isEmpty() && re_new_pass.isEmpty())
     {

        JOptionPane.showMessageDialog(this,"ENTER NEW PASSWORD and Re-
Type NEW PASSWORD");
     }
     else if(new_pass.equals(re_new_pass))
     {
         try{
        Class.forName("com.mysql.jdbc.Driver");
```

```
        Connection con = (Connection)

DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");
        Statement stmt = null;
        ResultSet rs = null;


         String SQL = "SELECT * FROM details WHERE password like
'%"+(old_pass)+"%'";
         stmt = con.createStatement();
         rs = stmt.executeQuery(SQL);


           if (rs.next()!= rs.isAfterLast()) {
           String cID = rs.getString("id");
           String cuser = rs.getString("username");
           String cpass = rs.getString("password");
           String cemail = rs.getString("email");
           String cAdd = rs.getString("address");
           String cPh = rs.getString("mob_no");
           String cbal = rs.getString("balance");
            if(cpass.equals(old_pass))
            {
                String SQL1 = "SELECT * FROM details";
                  stmt = con.createStatement();
                  rs = stmt.executeQuery(SQL1);
```

```
        String strSQL = "Update details set password = "+(new_pass)+" where
password = " + (old_pass);
        int rowsEffected = stmt.executeUpdate(strSQL);
        if (rowsEffected == 0){
           JOptionPane.showMessageDialog(this, "Password Is Not Changed ");
        }
        else{
            JOptionPane.showMessageDialog(this,"Password Changed
Successfully");
        }


           }
            else
            {
                JOptionPane.showMessageDialog(this,"PASSWORD DOESN'T
MATCHED");
            }
        con.close();
        stmt.close();
        rs.close();
           }
        }
         catch(Exception e){
```

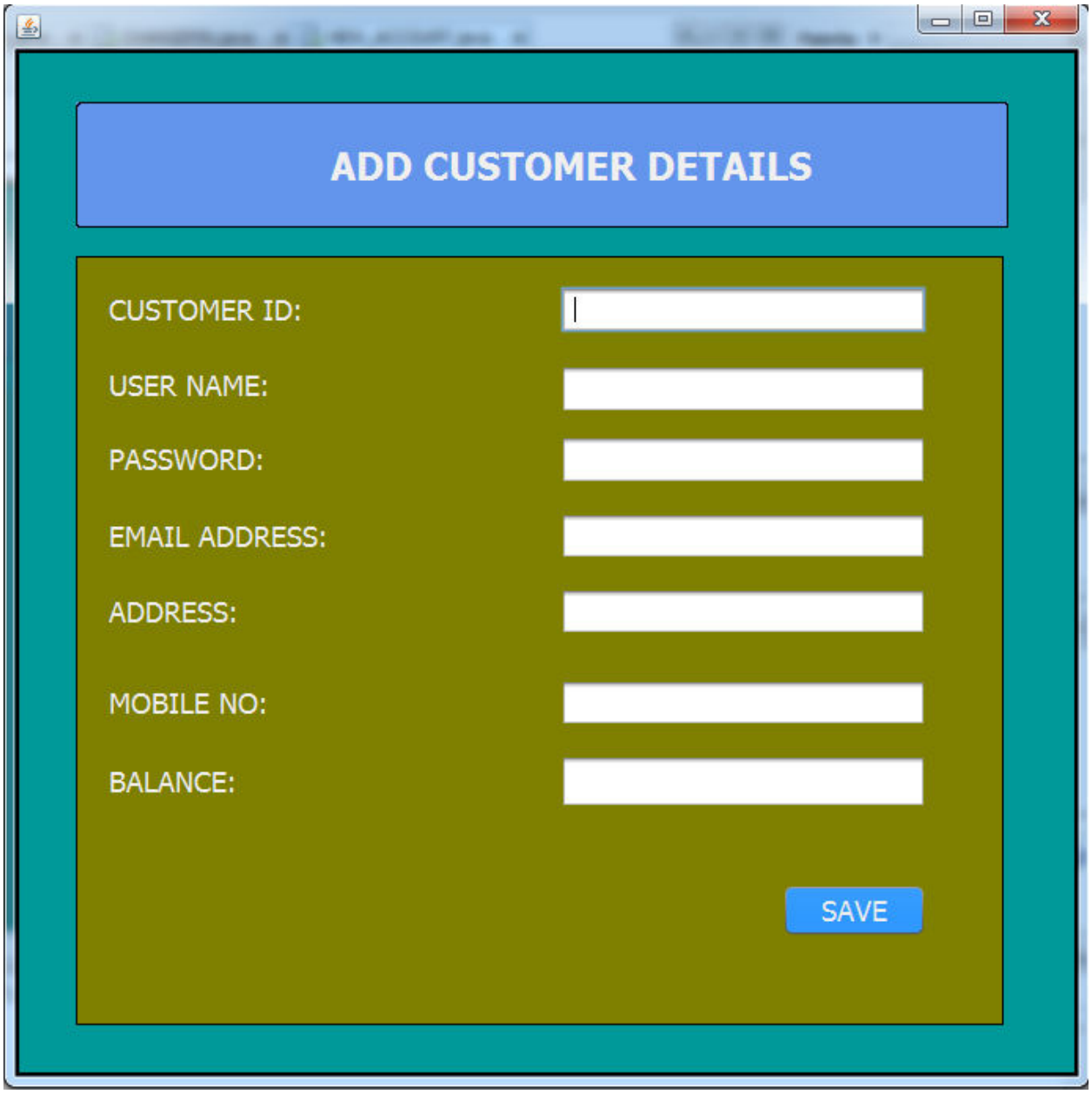
```
                JOptionPane.showMessageDialog(this, e.getMessage());


            }
        }
        else
        {
            JOptionPane.showMessageDialog(this,"New Password Doesn't Matched
With RE-Type Password");
        }
    }
  public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new CHANGEPIN().setVisible(true);
            }
        });
    }
  private void close() {
        WindowEvent winClosingEvent=new
WindowEvent(this,WindowEvent.WINDOW_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(winClosingEvent);
    }


}
```




```
public class Admin extends javax.swing.JFrame {


    public Admin() {
        initComponents();
    }
  private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        CHANGEPIN cp=new CHANGEPIN();
        cp.setVisible(true);
    }
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        NEW_ACCOUNT na =new NEW_ACCOUNT();
        na.setVisible(true);
         }
```

```
  private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
     close();
   }
  private void formWindowGainedFocus(java.awt.event.WindowEvent evt) {
        DefaultTableModel model =(DefaultTableModel) jTable1.getModel();
       int rows=model.getRowCount();
       if(rows > 0)
       {
          for( int i=0; i< rows ;i++)
          {
          model.removeRow(0);
          }
       }
       String query ="SELECT id,username,password,email,address,mob_no,balance
FROM details";
        try{
          Class.forName("com.mysql.jdbc.Driver").newInstance();
          Connection con = (Connection)

DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");
           Statement stmt =  con.createStatement();
         ResultSet rs =stmt.executeQuery(query);
        while(rs.next())
        {
           String id = rs.getString("id");
```

```
            String username = rs.getString("username");
            String password = rs.getString("password");
            String email = rs.getString("email");
            String address = rs.getString("address");
            String mobno = rs.getString("mob_no");
            String balance = rs.getString("balance");
            model.addRow(new Object[]
{id,username,password,email,address,mobno,balance});
        }
       }
        catch(Exception e)
        {
           JOptionPane.showMessageDialog(this, e.getMessage());
        }
   }
  private void close() {
          WindowEvent winClosingEvent=new
WindowEvent(this,WindowEvent.WINDOW_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(winClosingEvent);
}       public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
          public void run() {
             new Admin().setVisible(true);}
          }
```




```
public class NEW_ACCOUNT extends javax.swing.JFrame {
    Connection conn =null;
    PreparedStatement pst=null;
    ResultSet rs=null;
     public NEW_ACCOUNT() {
```

```
        initComponents();
    }
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        String username=jTextField1.getText();
        String id=jTextField10.getText();
        String pass=new String(password.getPassword());

        String email,address;

        email=jTextField6.getText();
        address=jTextField3.getText();

        String balance=jTextField2.getText();
        String mobno=jTextField8.getText();
        if(id.isEmpty())
        {
           JOptionPane.showMessageDialog(null, "Enter ID");
        }
        else if(username.isEmpty())
        {
           JOptionPane.showMessageDialog(null, "ENTER YOUR USER NAME");

        }
        else if(pass.isEmpty())
```

```
{
   JOptionPane.showMessageDialog(null, "ENTER YOUR PASSWORD");
}

else if(email.isEmpty())
{
   JOptionPane.showMessageDialog(null, "Email field can't be left empty");
}
else if(address.isEmpty())
{
   JOptionPane.showMessageDialog(null, "Address field can't be left empty");
}

 else if(mobno.isEmpty())
{
   JOptionPane.showMessageDialog(null, "ENTER YOUR MOBILE No");
}
else if(balance.isEmpty())
{
   JOptionPane.showMessageDialog(null, "ENTER SOME AMOUNT");
}
else
{
Connection conn=null;
```

```
PreparedStatement pstmt=null;
try{
    Class.forName("java.sql.DriverManager");
    conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/atm","root","root");
    Statement stmt=null;
    stmt=conn.createStatement();
   String query=("INSERT INTO
details(id,username,password,email,address,mob_no,balance) values
('"+id+"','"+username+"','"+pass+"','"+email+"','"+address+"',"+mobno+","+balanc
e+")");
    int qexecute=stmt.executeUpdate(query);
   JOptionPane.showMessageDialog(this, "ACCOUNT INFORMATION SAVED
SUCCESSFULLY");
       jButton1.setEnabled(false);
       jTextField1.setText("");
       jTextField2.setText("");
       jTextField3.setText("");
      password.setText("");
       jTextField6.setText("");
       jTextField10.setText("");
       jTextField8.setText("");

    }
 catch(Exception e)
 {
```

```
        JOptionPane.showMessageDialog(this, e.getMessage());
      }
 }
 }
private void close() {
      WindowEvent winClosingEvent=new
WindowEvent(this,WindowEvent.WINDOW_CLOSING);

Toolkit.getDefaultToolkit().getSystemEventQueue().postEvent(winClosingEvent);
   }

   private PreparedStatement setString(Object object, String text) {
        return null;
   }
public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
         public void run() {
            new NEW_ACCOUNT().setVisible(true);
         }

   }
```

CONCLUSION: WE HAVE SUCCESSFULLY IMPLEMENT ATM SYSTEM USING MySQL DATABASE.