BANK MANAGEMENT SYSTEM SOFTWARE USING JAVA

//Login class Source code package bank.management.system; import java.awt.*; import java.awt.event.*; import javax.swing.*; import java.sql.*; public class Login extends JFrame implements ActionListener { //Global declaration of button JButton login, reg, emp, adm; JPasswordField pinTextField; JTextField username,PinTextField; Login(){ setTitle("BANK MANAGEMANT SYSTEM"); setSize(700,550); setLocation(350,150); setLayout(null); ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/main logo.jpg"));//Logo path setting Image i2 = i1.getImage().getScaledInstance(100, 100, Image.SCALE_DEFAULT);//logo placing

ImageIcon i3= new ImageIcon(i2);

```
JLabel label1 = new JLabel(i3);
label1.setBounds(200,10,100,100);// V BANKING modifier
add(label1);
JLabel text=new JLabel("V BANKING");
text.setFont(new Font("Osward", Font.BOLD, 38));// Font modifier
text.setBounds(300, 40, 300, 40);
add(text);
JLabel userid=new JLabel("USER ID");
userid.setFont(new Font("Raleway",Font.PLAIN, 18));// Font modifier
userid.setBounds(120, 150, 400, 40);
add(userid);
username = new JTextField();
username.setBounds(300,155,250,30);
username.setFont(new Font("Arial",Font.BOLD,14));
add(username);
JLabel password=new JLabel("PASSWORD");
password.setFont(new Font("Raleway", Font.PLAIN, 18));// Font modifier
password.setBounds(120, 220, 400, 40);
add(password);
```

```
PinTextField = new JPasswordField();
PinTextField.setBounds(300,225,250,30);
PinTextField.setFont(new Font("Arial",Font.BOLD,14));
add(PinTextField);
login = new JButton("SIGN IN");
login.setBounds(300,300,100,30);
login.addActionListener(this);
add(login);
// colouring the sign in button
login.setBackground(Color.BLACK);
login.setForeground(Color.WHITE);
reg = new JButton("SIGN UP");
reg.setBounds(300,350,100,30);
reg.addActionListener(this);
add(reg);
emp = new JButton("EMPLOYEE");
emp.setBounds(240,420,100,30);
emp.addActionListener(this);
add(emp);
adm = new JButton("ADMIN");
```

```
adm.setBounds(360,420,100,30);
  adm.addActionListener(this);
  add(adm);
  getContentPane().setBackground(Color.WHITE);//Changing frame background
  setVisible(true);
}
public void actionPerformed(ActionEvent e) {
if(e.getSource()== login){
 jdbc_connection c =new jdbc_connection();
  String userid1 = username.getText();
  String pinnumber = PinTextField.getText();
  String query= "select * from Login where userid = ""+userid1+"" and password1 = ""+pinnumber+""";
  try{
    ResultSet rs = c.s.executeQuery(query);
    if(rs.next()){
      setVisible(false);
       new transactions(pinnumber).setVisible(true);
    }else{
      JOptionPane.showMessageDialog(null, "Incorrect User id or Pasword");
    }
  }catch(Exception ea){
```

```
System.out.println(ea);
    }
  }else if(e.getSource()==reg){
    setVisible(false);
    new Customersignup().setVisible(true);
  }else if(e.getSource()==emp){
    setVisible(false);
    new EmployeeLogin().setVisible(true);
  }else if(e.getSource()==adm){
    setVisible(false);
    new AdminLogin().setVisible(true);
  }
}
  public static void main(String[] args) {
    new Login();
  }
}
```

//Customersignup class Source code

```
package bank.management.system;
import java.awt.*;
import java.awt.event.*;
```

```
import javax.swing.*;
public class Customersignup extends JFrame implements ActionListener {
  JTextField customer,password1,dob1,email1,acc1,userid1,pas1,pas2,address1,pincode1;
  JRadioButton male, female;
  JButton submit,back;
  Customersignup(){
    JLabel emp=new JLabel("CUSTOMER DETAILS");
    emp.setBounds(250, 50, 500, 80);
    emp.setFont(new Font("Raleway",Font.BOLD,28));
    add(emp);
    JLabel id=new JLabel("NAME:");
    id.setBounds(150, 50, 600, 200);
    id.setFont(new Font("Raleway",Font.PLAIN,18));
    add(id);
    customer =new JTextField();
    customer.setBounds(360, 135, 280, 30);
    customer.setFont(new Font("Raleway",Font.PLAIN,18));
    add(customer);
    JLabel pass=new JLabel("FATHER'S NAME: ");
    pass.setBounds(150, 50, 600, 300);
```

```
pass.setFont(new Font("Raleway",Font.PLAIN,18));
add(pass);
password1=new JTextField();
password1.setBounds(360, 185, 280, 30);
password1.setFont(new Font("Raleway",Font.PLAIN,18));
add(password1);
JLabel name=new JLabel("GENDER");
name.setBounds(150, 50, 600, 400);
name.setFont(new Font("Raleway",Font.PLAIN,18));
add(name);
male=new JRadioButton("MALE");
male.setBounds(360, 235, 100, 30);
add(male);
female=new JRadioButton("FEMALE");
female.setBounds(480, 235, 100, 30);
add(female);
JLabel pos=new JLabel("DATE OF BIRTH:");
pos.setBounds(150, 50, 600, 500);
pos.setFont(new Font("Raleway",Font.PLAIN,18));
add(pos);
```

```
dob1=new JTextField();
dob1.setBounds(360, 285, 200, 30);
dob1.setFont(new Font("Raleway",Font.PLAIN,18));
add(dob1);
JLabel email=new JLabel("EMAIL:");
email.setBounds(150, 50, 600, 600);
email.setFont(new Font("Raleway",Font.PLAIN,18));
add(email);
email1=new JTextField();
email1.setBounds(360, 335, 280, 30);
email1.setFont(new Font("Raleway",Font.PLAIN,18));
add(email1);
JLabel acc=new JLabel("ACCOUNT TYPE:");
acc.setBounds(150, 50, 600, 700);
acc.setFont(new Font("Raleway",Font.PLAIN,18));
add(acc);
acc1=new JTextField();
acc1.setBounds(360, 385, 280, 30);
acc1.setFont(new Font("Raleway",Font.PLAIN,18));
add(acc1);
```

```
JLabel userid=new JLabel("USER ID:");
userid.setBounds(150, 50, 600, 800);
userid.setFont(new Font("Raleway",Font.PLAIN,18));
add(userid);
userid1=new JTextField();
userid1.setBounds(360, 435, 280, 30);
userid1.setFont(new Font("Raleway",Font.PLAIN,18));
add(userid1);
JLabel pass1=new JLabel("PASSWORD:");
pass1.setBounds(150, 50, 600, 900);
pass1.setFont(new Font("Raleway",Font.PLAIN,18));
add(pass1);
pas1=new JTextField();
pas1.setBounds(360, 485, 280, 30);
pas1.setFont(new Font("Raleway",Font.PLAIN,18));
add(pas1);
JLabel pass2=new JLabel("COMFIRM PASSWORD:");
pass2.setBounds(150, 50, 600, 1000);
pass2.setFont(new Font("Raleway",Font.PLAIN,18));
```

```
add(pass2);
pas2=new JTextField();
pas2.setBounds(360, 535, 280, 30);
pas2.setFont(new Font("Raleway",Font.PLAIN,18));
add(pas2);
JLabel addr1=new JLabel("ADDRESS:");
addr1.setBounds(150, 50, 600, 1100);
addr1.setFont(new Font("Raleway",Font.PLAIN,18));
add(addr1);
address1=new JTextField();
address1.setBounds(360, 585, 280, 30);
address1.setFont(new Font("Raleway",Font.PLAIN,18));
add(address1);
JLabel pinn=new JLabel("PIN CODE:");
pinn.setBounds(150, 50, 600, 1200);
pinn.setFont(new Font("Raleway",Font.PLAIN,18));
add(pinn);
pincode1=new JTextField();
pincode1.setBounds(360, 635, 280, 30);
pincode1.setFont(new Font("Raleway",Font.PLAIN,18));
```

```
add(pincode1);
  setLayout(null);
  getContentPane().setBackground(Color.WHITE);
  setSize(800,800);
  setLocation(350,10);
  setVisible(true);
  submit=new JButton("Submit");
  submit.setBounds(250, 685, 150, 30);
  submit.addActionListener(this);
  add(submit);
  back=new JButton("Back");
  back.setBounds(450, 685, 100, 30);
  back.addActionListener(this);
  add(back);
}
public void actionPerformed(ActionEvent ae){
  String cosm1 = customer.getText(); //getText is used to get the text from textField.
  String fathername = password1.getText();
  String dob = dob1.getText();
  String mailid = email1.getText();
  String acctype = acc1.getText();
```

```
String userid = userid1.getText();
String password1 = pas1.getText();
String password2 = pas2.getText();
String address = address1.getText();
String pincode = pincode1.getText();
if(ae.getSource()==back){
  setVisible(false);
  new Login().setVisible(true);
}
try{
if(cosm1.equals("")){
  JOptionPane.showMessageDialog(null, "Customer Name Is Required");
}else if(fathername.equals("")){
  JOptionPane.showMessageDialog(null, "Father Name Is Required");
}else if(dob.equals("")){
  JOptionPane.showMessageDialog(null, "DOB Is Required");
}else if(mailid.equals("")){
  JOptionPane.showMessageDialog(null, "Mail Id Required");
}else if(acctype.equals("")){
  JOptionPane.showMessageDialog(null, "Specify Accountt Type");
}else if(userid.equals("")){
  JOptionPane.showMessageDialog(null, "User Id Is Required");
}else if(password1.equals("")){
  JOptionPane.showMessageDialog(null, "Password Is Required");
}else if(password2.equals("")){
```

```
JOptionPane.showMessageDialog(null, "Password Confirmation Required");
    }else if(address.equals("")){
      JOptionPane.showMessageDialog(null, "Address Is Required");
    }else if(pincode.equals("")){
      JOptionPane.showMessageDialog(null, "Specify Pincode");
    }else{
      jdbc_connection c =new jdbc_connection();
      String query1 = "insert into signupcustomer values("+cosm1+"',
""+fathername+"',""+dob+"',""+mailid+"',""+acctype+"',""+userid+"',""+password1+"',""+password2+"',""+a
ddress+"','"+pincode+"')";
      String query2 = "insert into Login values("+userid+"',"+password1+"")";
      c.s.executeUpdate(query1);
      c.s.executeUpdate(query2);
      JOptionPane.showMessageDialog(null, "Registered Successfully!");
      setVisible(false);
      new Login().setVisible(true);
          }
    } catch (Exception e){
      System.out.println(e);
    }
  }
  public static void main(String[] args) {
    new Customersignup();
  }
```

//EmployeeLogin class source code

```
package bank.management.system;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
public class EmployeeLogin extends JFrame implements ActionListener {
  JTextField empid1,PinTextField,name1,pos1;
  JButton log;
  EmployeeLogin(){
    JLabel emp=new JLabel("EMPLOYEE LOGIN");
    emp.setBounds(250, 50, 500, 80);
    emp.setFont(new Font("Raleway",Font.BOLD,28));
    add(emp);
    JLabel id=new JLabel("EMPLOYEE ID");
    id.setBounds(150, 50, 600, 200);
    id.setFont(new Font("Raleway",Font.PLAIN,18));
    add(id);
```

```
empid1=new JTextField();
empid1.setBounds(320, 135, 280, 30);
empid1.setFont(new Font("Raleway",Font.PLAIN,18));
add(empid1);
JLabel pass=new JLabel("PASSWORD");
pass.setBounds(150, 50, 600, 300);
pass.setFont(new Font("Raleway",Font.PLAIN,18));
add(pass);
PinTextField = new JPasswordField();
PinTextField.setBounds(320,185,280,30);
PinTextField.setFont(new Font("Arial",Font.BOLD,14));
add(PinTextField);
JLabel name=new JLabel("EMPLOYEE NAME");
name.setBounds(150, 50, 600, 400);
name.setFont(new Font("Raleway",Font.PLAIN,18));
add(name);
name1=new JTextField();
name1.setBounds(320, 235, 280, 30);
name1.setFont(new Font("Raleway",Font.PLAIN,18));
```

```
add(name1);
JLabel pos=new JLabel("POSITION");
pos.setBounds(150, 50, 600, 500);
pos.setFont(new Font("Raleway",Font.PLAIN,18));
add(pos);
pos1=new JTextField();
pos1.setBounds(320, 285, 280, 30);
pos1.setFont(new Font("Raleway",Font.PLAIN,18));
add(pos1);
log=new JButton("LOGIN");
log.setBounds(320, 350, 150, 30);
//button Colouring
log.setBackground(Color.BLACK);
log.setForeground(Color.WHITE);
log.addActionListener(this);
add(log);
setLayout(null);
getContentPane().setBackground(Color.WHITE);
setSize(800,550);
setLocation(300,150);
```

```
setVisible(true);
}
public void actionPerformed(ActionEvent ae){
  String empid = empid1.getText(); //getText is used to get the text from textField.
  String pass = PinTextField.getText();
  String name = name1.getText();
  String position = pos1.getText();
 try{
 if(empid.equals("")){
    JOptionPane.showMessageDialog(null, "Employee Id Required");
  }else if(pass.equals("")){
    JOptionPane.showMessageDialog(null, "Password Required");
  }else if(name.equals("")){
    JOptionPane.showMessageDialog(null, "Name Required");
  }else if(position.equals("")){
    JOptionPane.showMessageDialog(null, "Name Required");
  }else{
    jdbc_connection c=new jdbc_connection();
    String query1 = "insert into signupEmp values(""+empid+"','"+pass+"','"+name+"','"+position+"')";
    String query2 = "insert into Login values(""+empid+"",""+pass+"")";
    c.s.executeUpdate(query1);
    c.s.executeUpdate(query2);
```

```
}
    }catch (Exception e){
      System.out.println(e);
    }
   if(ae.getSource()== log){
      setVisible(false);
      new transactions(pass).setVisible(true);
   }
  }
  public static void main(String[] args) {
    new EmployeeLogin();
  } }
//AdminLogin class Source code
package bank.management.system;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
public class AdminLogin extends JFrame implements ActionListener {
  JTextField adm1,PinTextField,nam1;
  JButton log;
```

AdminLogin(){

```
JLabel emp=new JLabel("ADMIN LOGIN");
emp.setBounds(250, 50, 500, 80);
emp.setFont(new Font("Raleway",Font.BOLD,28));
add(emp);
JLabel id=new JLabel("ADMIN ID");
id.setBounds(150, 50, 600, 200);
id.setFont(new Font("Raleway",Font.PLAIN,18));
add(id);
adm1=new JTextField();
adm1.setBounds(320, 135, 280, 30);
adm1.setFont(new Font("Raleway",Font.PLAIN,18));
add(adm1);
JLabel pass=new JLabel("PASSWORD");
pass.setBounds(150, 50, 600, 300);
pass.setFont(new Font("Raleway",Font.PLAIN,18));
add(pass);
PinTextField = new JPasswordField();
PinTextField.setBounds(320,185,280,30);
PinTextField.setFont(new Font("Arial",Font.BOLD,14));
```

```
add(PinTextField);
JLabel pos=new JLabel("NAME");
pos.setBounds(150, 50, 600, 400);
pos.setFont(new Font("Raleway",Font.PLAIN,18));
add(pos);
nam1=new JTextField();
nam1.setBounds(320, 235, 280, 30);
nam1.setFont(new Font("Raleway",Font.PLAIN,18));
add(nam1);
log=new JButton("LOGIN");
log.setBounds(320, 280, 150, 30);
//button Colouring
log.setBackground(Color.BLACK);
log.setForeground(Color.WHITE);
log.addActionListener(this);
add(log);
setLayout(null);
getContentPane().setBackground(Color.WHITE);
setSize(800,550);
setLocation(300,150);
```

```
setVisible(true);
}
public void actionPerformed(ActionEvent ae){
  String admid = adm1.getText(); //getText is used to get the text from textField.
  String pass = PinTextField.getText();
  String name = nam1.getText();
  if(ae.getSource()==log){
    setVisible(false);
    new admin_interface().setVisible(true);
  }
try{
  if(admid.equals("")){
    JOptionPane.showMessageDialog(null, "Admin Id Required");
  }else if(pass.equals("")){
    JOptionPane.showMessageDialog(null, "Password Required");
  }else if(name.equals("")){
    JOptionPane.showMessageDialog(null, "Name Required");
  }else{
    jdbc_connection c=new jdbc_connection();
    String query1 = "insert into signupAdm values(""+admid+"",""+pass+"",""+name+"")";
    c.s.executeUpdate(query1);
    }
  }catch (Exception e){
```

```
System.out.println(e);
}

public static void main(String[] args) {
    new AdminLogin();
}
```

//transactions class Source code

```
package bank.management.system;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

public class transactions extends JFrame implements ActionListener {
    JButton deposit,withdraw,pinchange,balance,exit;
    String pinnumber;
    transactions(String pinnumber){
        this.pinnumber = pinnumber;
        setLayout(null);
    }
}
```

ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/main_tbg.jpg"));//Logo path setting Image i2 = i1.getImage().getScaledInstance(900, 900, Image.SCALE_DEFAULT);//logo placing ImageIcon i3= new ImageIcon(i2); JLabel image = new JLabel(i3); image.setBounds(0,0,900,900); add(image); JLabel text1 =new JLabel("Welcome To V Online BANKING"); text1.setBounds(222,80,700,35); text1.setForeground(Color.WHITE); text1.setFont(new Font("System", Font.BOLD, 30)); image.add(text1); JLabel text2 = new JLabel("Please Select Your Transaction"); text2.setBounds(250,150,700,35); text2.setForeground(Color.WHITE); text2.setFont(new Font("System", Font.BOLD, 25)); image.add(text2); deposit =new JButton("Deposit"); deposit.setBounds(160, 250, 200, 50); deposit.addActionListener(this); image.add(deposit);

withdraw = new JButton("Withdraw");

```
withdraw.setBounds(160, 350, 200, 50);
withdraw.addActionListener(this);
image.add(withdraw);
pinchange =new JButton("Pin Change");
pinchange.setBounds(520, 250, 200, 50);
pinchange.addActionListener(this);
image.add(pinchange);
balance =new JButton("Balance Enquiry");
balance.setBounds(520, 350, 200, 50);
balance.addActionListener(this);
image.add(balance);
exit =new JButton("Exit");
exit.setBounds(360, 450, 160, 50);
exit.addActionListener(this);
image.add(exit);
setTitle("BANK MANAGEMANT SYSTEM");
setSize(900,900);
setLocation(230,0);
setUndecorated(true);
```

setVisible(true);

```
}
public void actionPerformed(ActionEvent ae){
  if (ae.getSource()== exit ){
    System.exit(0);
  }else if(ae.getSource()== deposit){
    setVisible(false);
    new deposit(pinnumber).setVisible(true);
  }else if(ae.getSource()== withdraw){
    setVisible(false);
    new withdrawal(pinnumber).setVisible(true);
  }
  else if(ae.getSource()== balance){
    setVisible(false);
    new balance(pinnumber).setVisible(true);
  }
}
public static void main(String[] args) {
  new transactions("");
} }
```

//deposit class Source code

```
package bank.management.system;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;
import java.util.*;
public class deposit extends JFrame implements ActionListener{
  JTextField amount;
  JButton deposit, backb;
  String pinnumber;
  deposit(String pinnumber){
    this.pinnumber = pinnumber;
    setLayout(null);
    lmagelcon i1 = new lmagelcon(ClassLoader.getSystemResource("icons/main_tbg.jpg"));//Logo path
setting
    Image i2 = i1.getImage().getScaledInstance(900, 900, Image.SCALE_DEFAULT);//logo placing
    ImageIcon i3= new ImageIcon(i2);
    JLabel image = new JLabel(i3);
    image.setBounds(0,0,900,900);
    add(image);
```

```
JLabel text=new JLabel("Enter The Amount To Be Deposited");
text.setForeground(Color.WHITE);
text.setFont(new Font("System",Font.BOLD,30));
text.setBounds(200,80,700,35);
image.add(text);
amount = new JTextField();
amount.setBounds(300,200,300,50);
amount.setFont(new Font("Raleway",Font.BOLD,30));
image.add(amount);
deposit = new JButton("Deposit");
deposit.setBounds(350, 300, 200, 50);
deposit.addActionListener(this);
image.add(deposit);
backb =new JButton("Back");
backb.setBounds(350, 400, 200, 50);
backb.addActionListener(this);
image.add(backb);
```

```
setTitle("BANK MANAGEMANT SYSTEM");
    setSize(900,900);
    setLocation(230,0);
    //setUndecorated(true);
    setVisible(true);
  }
  public void actionPerformed(ActionEvent ae){
    try{
   if(ae.getSource()==deposit )
     String amountvalue=amount.getText();
     Date date=new Date();
     if(amountvalue.equals(""))
     {
        JOptionPane.showMessageDialog(null,"Please Enter The Valid Amount!");
     }else
     {
        jdbc_connection c=new jdbc_connection();
        String query2 = "insert into bank
values(""+pinnumber+"",""+date+"",'Deposit',""+amountvalue+"")";
        c.s.executeUpdate(query2);
        JOptionPane.showMessageDialog(null,"Rs "+amountvalue+" Depositted Successfully");
        setVisible(false);
        new transactions(pinnumber).setVisible(true);
```

```
}
   }else if(ae.getSource()==backb){
     setVisible(false);
     new transactions(pinnumber).setVisible(true);
    }
   }catch(Exception e){
        System.out.println(e);
        }
  }
  public static void main(String[] args) {
    new deposit("");
 }}
//withdrawal class Source code
package bank.management.system;
import java.awt.*;
import java.awt.event.ActionEvent;
```

```
import java.awt.event.ActionListener;
import javax.swing.*;
import java.util.*;
public class withdrawal extends JFrame implements ActionListener {
  JTextField amount;
  JButton withdraw, backb;
  String pinnumber;
  withdrawal(String pinnumber) {
    this.pinnumber = pinnumber;
    setLayout(null);
    ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/main_tbg.jpg"));//Logo path
setting
    Image i2 = i1.getImage().getScaledInstance(900, 900, Image.SCALE_DEFAULT);//logo placing
    ImageIcon i3 = new ImageIcon(i2);
    JLabel image = new JLabel(i3);
    image.setBounds(0, 0, 900, 900);
    add(image);
    JLabel text = new JLabel("Enter The Amount To Be Waithdrawn");
    text.setForeground(Color.WHITE);
    text.setFont(new Font("System", Font.BOLD, 30));
```

```
text.setBounds(200, 80, 700, 35);
image.add(text);
amount = new JTextField();
amount.setBounds(300, 200, 300, 50);
amount.setFont(new Font("Raleway", Font.BOLD, 30));
image.add(amount);
withdraw = new JButton("Withdraw");
withdraw.setBounds(350, 300, 200, 50);
withdraw.addActionListener(this);
image.add(withdraw);
backb = new JButton("Back");
backb.setBounds(350, 400, 200, 50);
backb.addActionListener(this);
image.add(backb);
setTitle(" BANK MANAGEMANT SYSTEM ");
setSize(900, 900);
setLocation(230, 0);
//setUndecorated(true);
setVisible(true);
```

}

```
public void actionPerformed(ActionEvent ae) {
    try {
      if (ae.getSource() == withdraw) {
        String amountvalue = amount.getText();
         Date date = new Date();
        if (amountvalue.equals("")) {
          JOptionPane.showMessageDialog(null, "Please Enter The Valid Amount <= 10,000");
        } else if (Integer.parseInt(amountvalue) <= getBalance()) {
          JOptionPane.showMessageDialog(null, "Insufficient Balance or Invalid Amount");
        } else {
          jdbc_connection c = new jdbc_connection();
           String query2 = "insert into bank values("" + pinnumber + "','" + date + "','Waithdraw','" +
amountvalue + "')";
          c.s.executeUpdate(query2);
          JOptionPane.showMessageDialog(null, "Rs" + amountvalue + "/- Waithdrawn Successfully");
          setVisible(false);
          new transactions(pinnumber).setVisible(true);
        }
      } else if (ae.getSource() == backb) {
        setVisible(false);
        new transactions(pinnumber).setVisible(true);
      }
    } catch (Exception e) {
      System.out.println(e);
```

```
}
  }
  public static void main(String[] args) {
    new withdrawal("");
  }
  private int getBalance() {
    // Implement code to retrieve the current balance from the database
    // using the provided PIN number
    int balance = 0; // Replace with actual balance retrieval logic
    return balance;
 }
//balance class Source code
```

```
package bank.management.system;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.util.*;
import java.sql.*;
public class balance extends JFrame implements ActionListener{
```

```
JButton backb;
  String pinnumber;
  balance(String pinnumber){
    this.pinnumber = pinnumber;
    setLayout(null);
    ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/main_tbg.jpg"));//Logo path
setting
    Image i2 = i1.getImage().getScaledInstance(900, 900, Image.SCALE_DEFAULT);//logo placing
    ImageIcon i3= new ImageIcon(i2);
    JLabel image = new JLabel(i3);
    image.setBounds(0,0,900,900);
    add(image);
    jdbc_connection c=new jdbc_connection();
    int balance=0;
    try{
      ResultSet rs=c.s.executeQuery("select * from bank where pin ='"+pinnumber+"'");
      while (rs.next()){
        if(rs.getString("type").equals("Deposit")){
          balance += Integer.parseInt(rs.getString("amount"));
        }else{
          if(balance < 0){
             System.out.println("Insufficient Balance");
```

```
break;
      }else{
        balance -= Integer.parseInt(rs.getString("amount"));
        }
   }
  }
  }catch(Exception e){
  System.out.println(e);
}
JLabel text=new JLabel("Your Current Account Balance is Rs "+balance+"/-");
text.setForeground(Color.WHITE);
text.setFont(new Font("System",Font.BOLD,30));
text.setBounds(150,250,700,35);
image.add(text);
backb =new JButton("Back");
backb.setBounds(350, 400, 200, 50);
backb.addActionListener(this);
image.add(backb);
setTitle(" BANK MANAGEMANT SYSTEM ");
setSize(900,900);
setLocation(230,0);
```

```
//setUndecorated(true);
    setVisible(true);
  }
  @Override
  public void actionPerformed(ActionEvent ae) {
    if(ae.getSource()==backb){
      setVisible(false);
      new transactions(pinnumber).setVisible(true);
    }
  }
  public static void main(String[] args) {
    new balance("");
    }
}
//balance class Source code
package bank.management.system;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.util.*;
```

import java.sql.*;

public class balance extends JFrame implements ActionListener{ JButton backb; String pinnumber; balance(String pinnumber){ this.pinnumber = pinnumber; setLayout(null); lmagelcon i1 = new lmagelcon(ClassLoader.getSystemResource("icons/main_tbg.jpg"));//Logo path setting Image i2 = i1.getImage().getScaledInstance(900, 900, Image.SCALE_DEFAULT);//logo placing ImageIcon i3= new ImageIcon(i2); JLabel image = new JLabel(i3); image.setBounds(0,0,900,900); add(image); jdbc_connection c=new jdbc_connection(); int balance=0; try{ ResultSet rs=c.s.executeQuery("select * from bank where pin =""+pinnumber+"""); while (rs.next()){

```
if(rs.getString("type").equals("Deposit")){
      balance += Integer.parseInt(rs.getString("amount"));
    }else{
      if(balance < 0){
        System.out.println("Insufficient Balance");
        break;
      }else{
        balance -= Integer.parseInt(rs.getString("amount"));
      }
    }
  }
}catch(Exception e){
  System.out.println(e);
}
JLabel text=new JLabel("Your Current Account Balance is Rs "+balance+"/-");
text.setForeground(Color.WHITE);
text.setFont(new Font("System",Font.BOLD,30));
text.setBounds(150,250,700,35);
image.add(text);
backb =new JButton("Back");
backb.setBounds(350, 400, 200, 50);
backb.addActionListener(this);
```

```
image.add(backb);
    setTitle(" BANK MANAGEMANT SYSTEM ");
    setSize(900,900);
    setLocation(230,0);
    //setUndecorated(true);
    setVisible(true);
  }
  @Override
  public void actionPerformed(ActionEvent ae) {
    if(ae.getSource()==backb){
      setVisible(false);
      new transactions(pinnumber).setVisible(true);
   }
  }
  public static void main(String[] args) {
    new balance("");
   }
}
```

//admin_interface class Source code

```
package bank.management.system;
import java.awt.Color;
```

```
import java.awt.Font;
import javax.swing.*;
import java.sql.*;
public class admin_interface extends JFrame {
  admin_interface(){
    setTitle("Database");
    setLayout(null);
    JLabel mini1 = new JLabel();
    add(mini1);
    JLabel mini2 = new JLabel();
    add(mini2);
    JLabel bank = new JLabel("V Bank");
    bank.setBounds(250,80,100,20);
    bank.setFont(new Font("Raleway",Font.BOLD,28));
    add(bank);
    JLabel userlab = new JLabel("Customer Id
                                                     Customer Name");
    userlab.setBounds(50,200,300,20);
```

```
add(userlab);
JLabel userlab_line = new JLabel("_____");
userlab line.setBounds(50,205,250,20);
add(userlab_line);
emp1.setBounds(300,200,300,20);
add(emp1);
JLabel emp_line = new JLabel("______
emp_line.setBounds(300,205,300,20);
add(emp_line);
JLabel card=new JLabel();
card.setBounds(280,150,300,60);
add(card);
//Customer details retrival
try{
jdbc_connection c=new jdbc_connection();
ResultSet rs= c.s.executeQuery("select * from signupcustomer");
while(rs.next()){
```

```
mini1.setText(mini1.getText()+"<html>"+rs.getString("userid")+"&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
sp;   "+ rs.getString("cosm1")+"<br><html>");
   }
   }catch(Exception e){
     System.out.println(e);
   }
   mini1.setBounds(50,10,400,500);
   //Employee details retrival
   try{
   jdbc_connection c=new jdbc_connection();
   ResultSet rs= c.s.executeQuery("select * from signupEmp");
   while(rs.next()){
mini2.setText(mini2.getText()+"<html>"+rs.getString("empid")+"&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
bsp;       
rs.getString("name")+"         
rs.getString("position")+"<br><html>");
   }
   }catch(Exception e){
     System.out.println(e);
```

```
}
    mini2.setBounds(300,10,400,500);
    setSize(680,750);
    setLocation(450,0);
    getContentPane().setBackground(Color.WHITE);
    setVisible(true);
  }
  public static void main(String[] args) {
    new admin_interface();
 }
}
//jdbc_connection class Source code
package bank.management.system;
import java.sql.*;
public class jdbc_connection {
  Connection c;
 //creating Statement
```

```
public jdbc_connection(){
    try{//NO need of Registering to the driver because the imported library(mysql-connector-java) done
that task.
    //creating connection
    c =
DriverManager.getConnection("jdbc:mysql:///bankmanagementsystem","root","ramupalla912@2002");
    s = c.createStatement();
    } catch(Exception en){
        System.out.println(en);
    }
}
```

//My SQL commands

- → create database bankmanagementsystem;
- → use bankmanagementsystem;
- → show tables;
- → create table Login(userid varchar(50), password1 varchar(20));
- → select * from Login;
- → create table signupcustomer(cosm1 varchar(20), fathername varchar(20), dob varchar(20), mailid varchar(50), acctype varchar(20), userid varchar(20), password1 varchar(20), password2 varchar(20), address varchar(20), pincode varchar(20));
- → select * from signupcustomer;

→	create table signupEmp(empid varchar(20), pass varchar(20), name varchar(20), position varchar(20));
→	select * from signupEmp;
	create table signupAdm(adminid varchar(20), pass varchar(20), name varchar(20)); select * from signupAdm;
	create table bank(pin varchar(20), date varchar(50), type varchar(20), amount varchar(20)); select * from bank;