Appendix

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this
license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this
template
 */
package com.raven.main;
import java.awt.Color;
import java.awt.GradientPaint;
import java.awt.Graphics;
import java.awt.Graphics2D;
import java.awt.RenderingHints;
import javax.swing.JOptionPane;
/**
 *
 * @author xymbol
 */
public class login extends javax.swing.JFrame {

    /**
     * Creates new form login
     */
    public login() {
        initComponents();
    }
    protected void paintChildren(Graphics grphcs) {
        Graphics2D g2 = (Graphics2D) grphcs;
        g2.setRenderingHint(RenderingHints.KEY_ANTIALIASING,
RenderingHints.VALUE_ANTIALIAS_ON);
        GradientPaint g = new GradientPaint(0, 0, Color.decode("#1CB5E0"), 0, getHeight(),
Color.decode("#000046"));
        g2.setPaint(g);
        g2.fillRoundRect(0, 0, getWidth(), getHeight(), 15, 15);
        g2.fillRect(getWidth() - 20, 0, getWidth(), getHeight());

    }
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
```

```
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        curvesPanel1 = new com.coals.swing.CurvesPanel();
        jLabel1 = new javax.swing.JLabel();
        myusr = new javax.swing.JTextField();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        login = new javax.swing.JButton();
        exit = new javax.swing.JButton();
        mypass = new javax.swing.JPasswordField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setUndecorated(true);
        setResizable(false);

        curvesPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

        jLabel1.setFont(new java.awt.Font("Lucida Grande", 1, 36)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(255, 255, 255));
        jLabel1.setText("Sign In");
        curvesPanel1.add(jLabel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(114, 62, -1,
55));

        myusr.setFont(new java.awt.Font("Lucida Grande", 0, 18)); // NOI18N
        myusr.setToolTipText("");
        myusr.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));
        myusr.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                myusrActionPerformed(evt);
            }
        });
        curvesPanel1.add(myusr, new org.netbeans.lib.awtextra.AbsoluteConstraints(91, 211, 168,
40));

        jLabel2.setFont(new java.awt.Font("Lucida Grande", 0, 24)); // NOI18N
        jLabel2.setForeground(new java.awt.Color(255, 255, 255));
        jLabel2.setText("Password");
        curvesPanel1.add(jLabel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(121, 269,
132, 26));

        jLabel3.setFont(new java.awt.Font("Lucida Grande", 0, 24)); // NOI18N
        jLabel3.setForeground(new java.awt.Color(255, 255, 255));
```

```
        jLabel3.setText("Username");
        curvesPanel1.add(jLabel3, new org.netbeans.lib.awtextra.AbsoluteConstraints(114, 167,
132, 26));

        login.setText("Login");
        login.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                loginActionPerformed(evt);
            }
        });
        curvesPanel1.add(login, new org.netbeans.lib.awtextra.AbsoluteConstraints(136, 397, -1,
39));

        exit.setText("X");
        exit.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                exitActionPerformed(evt);
            }
        });
        curvesPanel1.add(exit, new org.netbeans.lib.awtextra.AbsoluteConstraints(302, 14, 40, -
1));

        mypass.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                mypassActionPerformed(evt);
            }
        });
        curvesPanel1.add(mypass, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 310,
170, 50));

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(curvesPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, 352,
Short.MAX_VALUE)
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(curvesPanel1, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 480, Short.MAX_VALUE)
        );

        pack();
```

```
        setLocationRelativeTo(null);
    }// </editor-fold>

    private void myusrActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void loginActionPerformed(java.awt.event.ActionEvent evt) {
        if(myusr.getText().equals("")){
            JOptionPane.showMessageDialog(null, "Insert Username");
            myusr.requestFocus();
        }
        else if(mypass.getText().equals("")){
            JOptionPane.showMessageDialog(null, "Insert Password");
            myusr.requestFocus();
        }
        else if(myusr.getText().contains("admin") && mypass.getText().contains("123")){
            new Main().show();
            this.dispose();
        }else {JOptionPane.showMessageDialog(null, "Username and Password Incorrect!");}
    }

    private void exitActionPerformed(java.awt.event.ActionEvent evt) {
      this.dispose();
      System.exit(0);
    }

    private void mypassActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
```

```
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new login().setVisible(true);
        }
    });
  }

  // Variables declaration - do not modify
  private com.coals.swing.CurvesPanel curvesPanel1;
  private javax.swing.JButton exit;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel2;
  private javax.swing.JLabel jLabel3;
  private javax.swing.JButton login;
  private javax.swing.JPasswordField mypass;
  private javax.swing.JTextField myusr;
  // End of variables declaration
}
```

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package com.raven.main;

import com.coals.event.EventMenuSelected;
import com.coals.form.Form_1;
import com.coals.form.Form_2;
import com.coals.form.Form_3;




import java.awt.Color;
import javax.swing.JComponent;
import javax.swing.JPanel;

/**
 *
 * @author XymboL
 */
public class Main extends javax.swing.JFrame {

    /**
     * Creates new form Main
     */
    private Form_1 form1;
    private Form_2 form2;
    private Form_3 form3;


    int buttonz;

    public Main(int but) {
        this.buttonz = but;
}




    public void updateMainPanel(JPanel newPanel) {
        mainPanel.removeAll();
```

```
    mainPanel.add(newPanel);
    mainPanel.revalidate();
    mainPanel.repaint();
}



public Main() {
    initComponents();
    setBackground(new Color(0, 0, 0, 0));
    form1 = new Form_1();
    form2 = new Form_2();
    form3 = new Form_3();




    menu.initMoving(Main.this);
    menu.addEventMenuSelected(new EventMenuSelected() {
        @Override
        public void selected(int index) {
            if (index == 0) {
                setForm(form1);
            } else if (index == 1) {
                setForm(form2);
            }else if (index == 2) {
                setForm(form3);
            } }
    });


    //  set when system open start with home form
    setForm(new Form_1());


}


public void setForm(JComponent com) {
    mainPanel.removeAll();
    mainPanel.add(com);
    mainPanel.repaint();
    mainPanel.revalidate();
```

```
    }



    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        panelBorder1 = new com.coals.swing.PanelBorder();
        menu = new com.coals.component.Menu();
        header2 = new com.coals.component.Header();
        mainPanel = new javax.swing.JPanel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setUndecorated(true);

        panelBorder1.setBackground(new java.awt.Color(242, 242, 242));

        header2.setFont(new java.awt.Font("sansserif", 0, 14)); // NOI18N

        mainPanel.setOpaque(false);
        mainPanel.setLayout(new java.awt.BorderLayout());

        javax.swing.GroupLayout panelBorder1Layout = new
javax.swing.GroupLayout(panelBorder1);
        panelBorder1.setLayout(panelBorder1Layout);
        panelBorder1Layout.setHorizontalGroup(
            panelBorder1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(panelBorder1Layout.createSequentialGroup()
                .addComponent(menu, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(panelBorder1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                    .addComponent(header2, javax.swing.GroupLayout.DEFAULT_SIZE, 965,
Short.MAX_VALUE)
```

```
                .addGroup(panelBorder1Layout.createSequentialGroup()
                    .addGap(6, 6, 6)
                    .addComponent(mainPanel, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addContainerGap())))
        );
        panelBorder1Layout.setVerticalGroup(
            panelBorder1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(menu, javax.swing.GroupLayout.DEFAULT_SIZE, 657,
Short.MAX_VALUE)
            .addGroup(panelBorder1Layout.createSequentialGroup()
                .addComponent(header2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(mainPanel, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addContainerGap())
        );

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(panelBorder1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(panelBorder1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );

        pack();
        setLocationRelativeTo(null);
    }// </editor-fold>

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        new Main();
```

```
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Main.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        }
        //</editor-fold>

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new login().setVisible(true);

            }
        });
    }

    // Variables declaration - do not modify
    private com.coals.component.Header header2;
    private javax.swing.JPanel mainPanel;
    private com.coals.component.Menu menu;
    private com.coals.swing.PanelBorder panelBorder1;
    // End of variables declaration                   }
```

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package com.coals.form;

import com.coals.event.EventMenuSelected;
import com.coals.model.Model_Card;
import javax.swing.ImageIcon;
/**
 *
 * @author Xymbol
 */
public class Form_1 extends javax.swing.JPanel {

      private EventMenuSelected event;

   public void addEventMenuSelected(EventMenuSelected event) {
      this.event = event;

   }

int but;


   /**
    * Creates new form Form_1
    */
   public Form_1() {
      initComponents();
      card1.setData(new Model_Card(new
ImageIcon(getClass().getResource("/com/raven/icon/sayatan/1.png")), "dip parallel to slope",
"Dip > Slope"));
      card2.setData(new Model_Card(new
ImageIcon(getClass().getResource("/com/raven/icon/sayatan/2.png")), "dip parallel to slope",
"Slope > dip"));
      card3.setData(new Model_Card(new
ImageIcon(getClass().getResource("/com/raven/icon/sayatan/3.png")), "dip opposite to slope",
"Dip > Slope"));
      card4.setData(new Model_Card(new
ImageIcon(getClass().getResource("/com/raven/icon/sayatan/4.png")), "dip opposite to slope",
"Slope > dip"));
```

```
        card5.setData(new Model_Card(new
ImageIcon(getClass().getResource("/com/raven/icon/sayatan/5.png")), "horizontal layer", "no
condition"));
        card6.setData(new Model_Card(new
ImageIcon(getClass().getResource("/com/raven/icon/sayatan/6.png")), "vertical layer", "no
condition"));



  // add action listener to the button

    }



    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        button1 = new com.coals.swing.Button();
        button2 = new com.coals.swing.Button();
        card1 = new com.coals.component.Card();
        card2 = new com.coals.component.Card();
        jPanel5 = new javax.swing.JPanel();
        button3 = new com.coals.swing.Button();
        button4 = new com.coals.swing.Button();
        card3 = new com.coals.component.Card();
        card4 = new com.coals.component.Card();
        jPanel2 = new javax.swing.JPanel();
        button6 = new com.coals.swing.Button();
        button5 = new com.coals.swing.Button();
        card5 = new com.coals.component.Card();
        card6 = new com.coals.component.Card();

        setBackground(new java.awt.Color(242, 242, 242));
        setPreferredSize(new java.awt.Dimension(915, 592));
        setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());
```

```
jPanel1.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

button1.setText("Calculate");
button1.setToolTipText("");
button1.addMouseListener(new java.awt.event.MouseAdapter() {
   public void mouseClicked(java.awt.event.MouseEvent evt) {
      button1MouseClicked(evt);
   }
});
jPanel1.add(button1, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 70, -1, -1));

button2.setText("Calculate");
button2.addMouseListener(new java.awt.event.MouseAdapter() {
   public void mouseClicked(java.awt.event.MouseEvent evt) {
      button2MouseClicked(evt);
   }
});
jPanel1.add(button2, new org.netbeans.lib.awtextra.AbsoluteConstraints(580, 70, -1, -1));

card1.setColor1(new java.awt.Color(0, 102, 102));
jPanel1.add(card1, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1, -1));

card2.setColor1(new java.awt.Color(0, 102, 0));
jPanel1.add(card2, new org.netbeans.lib.awtextra.AbsoluteConstraints(367, 0, -1, -1));

add(jPanel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(110, 0, -1, -1));

jPanel5.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

button3.setText("Calculate");
button3.addMouseListener(new java.awt.event.MouseAdapter() {
   public void mouseClicked(java.awt.event.MouseEvent evt) {
      button3MouseClicked(evt);
   }
});
jPanel5.add(button3, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 70, -1, -1));

button4.setText("Calculate");
button4.addMouseListener(new java.awt.event.MouseAdapter() {
   public void mouseClicked(java.awt.event.MouseEvent evt) {
      button4MouseClicked(evt);
   }
});
jPanel5.add(button4, new org.netbeans.lib.awtextra.AbsoluteConstraints(580, 70, -1, -1));
```

```
    card3.setColor1(new java.awt.Color(102, 51, 0));
    jPanel5.add(card3, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1, -1));

    card4.setColor1(new java.awt.Color(102, 0, 51));
    jPanel5.add(card4, new org.netbeans.lib.awtextra.AbsoluteConstraints(367, 0, -1, -1));

    add(jPanel5, new org.netbeans.lib.awtextra.AbsoluteConstraints(110, 200, -1, -1));

    jPanel2.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

    button6.setText("Calculate");
    button6.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            button6MouseClicked(evt);
        }
    });
    jPanel2.add(button6, new org.netbeans.lib.awtextra.AbsoluteConstraints(580, 70, -1, -1));

    button5.setText("Calculate");
    button5.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            button5MouseClicked(evt);
        }
    });
    jPanel2.add(button5, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 70, -1, -1));

    card5.setColor1(new java.awt.Color(51, 0, 102));
    jPanel2.add(card5, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1, -1));

    card6.setColor1(new java.awt.Color(0, 0, 102));
    jPanel2.add(card6, new org.netbeans.lib.awtextra.AbsoluteConstraints(367, 0, -1, -1));

    add(jPanel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 400, -1, -1));
}// </editor-fold>

private void button1MouseClicked(java.awt.event.MouseEvent evt) {
    new Cal1().setVisible(true);

}

private void button2MouseClicked(java.awt.event.MouseEvent evt) {
    new Cal2().setVisible(true);
```

```
    }

    private void button3MouseClicked(java.awt.event.MouseEvent evt) {
        new Cal3().setVisible(true);

    }

    private void button4MouseClicked(java.awt.event.MouseEvent evt) {
        new Cal4().setVisible(true);

    }

    private void button5MouseClicked(java.awt.event.MouseEvent evt) {
       new Cal5().setVisible(true);

    }

    private void button6MouseClicked(java.awt.event.MouseEvent evt) {
       new Cal6().setVisible(true);

    }


    // Variables declaration - do not modify
    private com.coals.swing.Button button1;
    private com.coals.swing.Button button2;
    private com.coals.swing.Button button3;
    private com.coals.swing.Button button4;
    private com.coals.swing.Button button5;
    private com.coals.swing.Button button6;
    private com.coals.component.Card card1;
    private com.coals.component.Card card2;
    private com.coals.component.Card card3;
    private com.coals.component.Card card4;
    private com.coals.component.Card card5;
    private com.coals.component.Card card6;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JPanel jPanel5;
    // End of variables declaration
}
```

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package com.coals.form;

import com.coals.event.PrintDoc;
import static com.coals.form.Form_2.table1data;
import java.awt.Color;
import java.awt.Desktop;
import java.io.File;
import java.io.IOException;
import java.text.DecimalFormat;
import java.util.ArrayList;
import java.util.Arrays;
import java.util.List;
import javax.swing.JOptionPane;

/**
 *
 * @author Xymbol
 */
public class Form_2 extends javax.swing.JPanel {
    public static double[][][] tabledata = new double [0][0][0];
    public static double[][][] data;
    public static double table1data[][];
    public static boolean status = false;
    public double[][] newArray;
    public double[][] newArray2 = new double[3][4];
    public double[][] arrResult;
    public static double coal1;
    public static double coal2;
    public static double coal3;
    public List<List<Double>> result = new ArrayList<>();


public static double sumproduct(double[] arr1, List<List<Double>> arr2, int x) {
    if (arr1.length == 0 || arr2.isEmpty() || arr2.get(0).isEmpty()) {
        return 0;
    }
    double value = arr2.get(0).get(x);
    if (Double.isNaN(value)) {
        value = 0;
```

```
    }
    return arr1[0] * value + sumproduct(Arrays.copyOfRange(arr1, 1, arr1.length)
            ,arr2.subList(1, arr2.size()), x);
}

DecimalFormat df = new DecimalFormat("#.##");



double v1;
double v2 = 38.8;
double v3 = 0.0;
double vadd = 1.2;







    /**
     * Creates new form Form_1
     */
    public Form_2() {
        v1 = 100-v2-v3-vadd;
        initComponents();

    Coal1.setText(String.valueOf(df.format(v1)));
    Coal2.setText(String.valueOf(df.format(v2)));
    Coal3.setText(String.valueOf(df.format(v3)));


  }




    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {
```

```
jPanel2 = new javax.swing.JPanel();
Coal1 = new javax.swing.JTextField();
Coal2 = new javax.swing.JTextField();
Coal3 = new javax.swing.JTextField();
coal3down = new javax.swing.JLabel();
coal3up = new javax.swing.JLabel();
coal2up = new javax.swing.JLabel();
coal2down = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
jLabel13 = new javax.swing.JLabel();
opendoc = new javax.swing.JLabel();
execbutton = new com.coals.swing.Button();
jLabel9 = new javax.swing.JLabel();

setBackground(new java.awt.Color(242, 242, 242));
setPreferredSize(new java.awt.Dimension(915, 592));
setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jPanel2.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

Coal1.setHorizontalAlignment(javax.swing.JTextField.CENTER);
Coal1.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      Coal1ActionPerformed(evt);
   }
});
jPanel2.add(Coal1, new org.netbeans.lib.awtextra.AbsoluteConstraints(80, 70, 111, 50));

Coal2.setHorizontalAlignment(javax.swing.JTextField.CENTER);
Coal2.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      Coal2ActionPerformed(evt);
   }
});
jPanel2.add(Coal2, new org.netbeans.lib.awtextra.AbsoluteConstraints(380, 70, 111, 50));

Coal3.setHorizontalAlignment(javax.swing.JTextField.CENTER);
Coal3.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      Coal3ActionPerformed(evt);
   }
});
```

```
        jPanel2.add(Coal3, new org.netbeans.lib.awtextra.AbsoluteConstraints(720, 70, 111, 50));

        coal3down.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/raven/icon/buttondown.png"))); //
NOI18N
        coal3down.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                coal3downMouseClicked(evt);
            }
        });
        jPanel2.add(coal3down, new org.netbeans.lib.awtextra.AbsoluteConstraints(670, 100, 35,
35));

        coal3up.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/raven/icon/buttonup.png"))); // NOI18N
        coal3up.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                coal3upMouseClicked(evt);
            }
        });
        jPanel2.add(coal3up, new org.netbeans.lib.awtextra.AbsoluteConstraints(670, 60, 35, 35));

        coal2up.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/raven/icon/buttonup.png"))); // NOI18N
        coal2up.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                coal2upMouseClicked(evt);
            }
        });
        jPanel2.add(coal2up, new org.netbeans.lib.awtextra.AbsoluteConstraints(330, 60, 35, 35));

        coal2down.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/raven/icon/buttondown.png"))); //
NOI18N
        coal2down.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                coal2downMouseClicked(evt);
            }
        });
        jPanel2.add(coal2down, new org.netbeans.lib.awtextra.AbsoluteConstraints(330, 100, 35,
35));

        jLabel5.setFont(new java.awt.Font("Lucida Grande", 0, 18)); // NOI18N
        jLabel5.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
```

```
        jLabel5.setText("Coal 1");
        jPanel2.add(jLabel5, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 20, 90, 40));

        jLabel6.setFont(new java.awt.Font("Lucida Grande", 0, 18)); // NOI18N
        jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel6.setText("Coal 3");
        jPanel2.add(jLabel6, new org.netbeans.lib.awtextra.AbsoluteConstraints(720, 20, 100, 40));

        jLabel13.setFont(new java.awt.Font("Lucida Grande", 0, 18)); // NOI18N
        jLabel13.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel13.setText("Coal 2");
        jPanel2.add(jLabel13, new org.netbeans.lib.awtextra.AbsoluteConstraints(380, 20, 100,
40));

        add(jPanel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 152, 915, 159));

        opendoc.setFont(new java.awt.Font("Lucida Grande", 0, 14)); // NOI18N
        opendoc.setForeground(new java.awt.Color(204, 204, 255));
        opendoc.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        opendoc.setText("Fill This Document");
        opendoc.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                opendocMouseClicked(evt);
            }
            public void mouseEntered(java.awt.event.MouseEvent evt) {
                opendocMouseEntered(evt);
            }
            public void mouseExited(java.awt.event.MouseEvent evt) {
                opendocMouseExited(evt);
            }
        });
        add(opendoc, new org.netbeans.lib.awtextra.AbsoluteConstraints(371, 488, -1, -1));

        execbutton.setText("Execute");
        execbutton.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                execbuttonMouseClicked(evt);
            }
        });
        add(execbutton, new org.netbeans.lib.awtextra.AbsoluteConstraints(382, 424, 104, 52));

        jLabel9.setFont(new java.awt.Font("Lucida Grande", 0, 24)); // NOI18N
        jLabel9.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel9.setText("Ratio");
```

```
   add(jLabel9, new org.netbeans.lib.awtextra.AbsoluteConstraints(390, 60, 100, 40));
}// </editor-fold>

private void Coal2ActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
}

private void Coal3ActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
}

private void Coal1ActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
}

private void opendocMouseClicked(java.awt.event.MouseEvent evt) {
File docxFile = new File("document.docx");
try {
  Desktop.getDesktop().open(docxFile);
} catch (IOException e) {
  JOptionPane.showMessageDialog(null, ("Error opening file: " + e.getMessage()));
}

}

private void coal2upMouseClicked(java.awt.event.MouseEvent evt) {

  v2 += 0.10;
  v1 = 100.0 - v2 - v3-vadd;
  Coal1.setText(String.valueOf(df.format(v1)));
  Coal2.setText(String.valueOf(df.format(v2)));

}

private void coal2downMouseClicked(java.awt.event.MouseEvent evt) {

  v2 -= 0.10;
  v1 = 100.0 - v2 - v3-vadd;
  Coal1.setText(String.valueOf(df.format(v1)));
  Coal2.setText(String.valueOf(df.format(v2)));

}

private void coal3upMouseClicked(java.awt.event.MouseEvent evt) {
```

```
      v3 += 0.10;
      v1 = 100.0 - v2 - v3-vadd;
      Coal1.setText(String.valueOf(df.format(v1)));
      Coal3.setText(String.valueOf(df.format(v3)));

    }

    private void coal3downMouseClicked(java.awt.event.MouseEvent evt) {
      v3 -= 0.10;
      v1 = 100.0 - v2 - v3-vadd;
      Coal1.setText(String.valueOf(df.format(v1)));
      Coal3.setText(String.valueOf(df.format(v3)));

    }

    private void opendocMouseEntered(java.awt.event.MouseEvent evt) {
       opendoc.setForeground(new Color(0,204,255));

    }

    private void opendocMouseExited(java.awt.event.MouseEvent evt) {
        opendoc.setForeground(new Color(0,102,204));
    }

    private void execbuttonMouseClicked(java.awt.event.MouseEvent evt) {
 data = com.coals.event.ReadDoc.readTablesFromWordDocument("document.docx");
 tabledata = data;
 table1data = data[0];

 int numRows = table1data.length;
int numCols = table1data[0].length;
  newArray = new double[numRows-1][];
for (int i = 1; i < table1data.length; i++) {
    newArray[i - 1] = table1data[i];
}




  for(int i=0;i<=2;i++){
     newArray2[i][0]=newArray[i][2]*100/(100-newArray[i][1]);
  }
    for(int i=0;i<=2;i++){
```

```
    newArray2[i][1]=100-newArray[i][1]-newArray[i][2]-newArray[i][3];
  }
   for(int i=0;i<=2;i++){
    newArray2[i][2]=newArray[i][4]*(100-newArray[i][0])/(100-newArray[i][1]);
  }
      for(int i=0;i<=2;i++){
    newArray2[i][3]=newArray[i][5]*(100-newArray[i][0])/(100-newArray[i][1]);
  }
   int rows = newArray.length;
   int columns = newArray[0].length + newArray[0].length;

   //Move to Arraylist to easier the calc


for (int i = 0; i < newArray.length; i++) {
    List<Double> row = new ArrayList<>();
    for (int j = 0; j < newArray[0].length; j++) {
        row.add(newArray[i][j]);
    }
    for (int j = 0; j < newArray2[0].length; j++) {
        row.add(newArray2[i][j]);
    }
    result.add(row);
}
double []ratio = {v1,v2,v3};
double []ratios = {v1,v2,v3,vadd};
double com1 =sumproduct(ratios, result, 0)/100;
double com2 =sumproduct(ratios, result, 1)/100;
double com3 =sumproduct(ratios, result, 2)/100;
double com5 =sumproduct(ratios, result, 4)/100;
double com6 =sumproduct(ratios, result, 5)/100;
double com7 = com3*100/(100-com2);
double com8 =sumproduct(ratios, result, 7)/100;
double com9 = com5*(100-com1)/(100-com2);
double com10 = com6*(100-com1)/(100-com2);
double [] composite={100, com1, com2, com3, 0.50,com5,com6,com7,com8,com9,com10};
PrintDoc example = new PrintDoc();
example.createWordDocument("Table 1",result, composite,ratio);
File docxFile = new File("result.docx");
    try {
      Desktop.getDesktop().open(docxFile);
    } catch (IOException e) {
      JOptionPane.showMessageDialog(null, ("Error opening file: " + e.getMessage()));
    }
```

```
    }


    // Variables declaration - do not modify
    private javax.swing.JTextField Coal1;
    private javax.swing.JTextField Coal2;
    private javax.swing.JTextField Coal3;
    private javax.swing.JLabel coal2down;
    private javax.swing.JLabel coal2up;
    private javax.swing.JLabel coal3down;
    private javax.swing.JLabel coal3up;
    private com.coals.swing.Button execbutton;
    private javax.swing.JLabel jLabel13;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel9;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JLabel opendoc;
    // End of variables declaration
}
```

Cal 1-6

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this
license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this
template
 */
package com.coals.form;

import com.raven.main.Main;
import com.coals.model.composite;
import com.coals.model.formula;
import com.coals.model.volumeformula;
import java.text.DecimalFormat;

/**
 *
 * @author xymbol
 */
public class Cal1 extends javax.swing.JFrame {

    /**
     * Creates new form Cal1
     */
    public Cal1() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jPanel3 = new javax.swing.JPanel();
        curvesPanel1 = new com.coals.swing.CurvesPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jRadioButton1 = new javax.swing.JRadioButton();
        jPanel1 = new javax.swing.JPanel();
        jLabel6 = new javax.swing.JLabel();
```

```
        widthf = new javax.swing.JTextField();
        lengthf = new javax.swing.JTextField();
        jLabel8 = new javax.swing.JLabel();
        jPanel2 = new javax.swing.JPanel();
        jLabel5 = new javax.swing.JLabel();
        wfill = new javax.swing.JTextField();
        ofill = new javax.swing.JTextField();
        jLabel4 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        dfill = new javax.swing.JTextField();
        butcalc = new com.coals.swing.Button();
        resultfill = new javax.swing.JTextField();
        jLabel7 = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setUndecorated(true);
        getContentPane().setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

        jPanel3.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

        jLabel1.setFont(new java.awt.Font("PT Serif", 0, 18)); // NOI18N
        jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel1.setText("Length");

        jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel2.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/raven/icon/sayatann/Screenshot 2023-
02-02 at 07.52.07.png"))); // NOI18N

        jRadioButton1.setFont(new java.awt.Font("PT Serif", 0, 18)); // NOI18N
        jRadioButton1.setForeground(new java.awt.Color(255, 255, 255));
        jRadioButton1.setText("Have Length and Width?");
        jRadioButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jRadioButton1ActionPerformed(evt);
            }
        });

        jPanel1.setBackground(new java.awt.Color(255, 255, 255));
        jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Insert Width and
Length"));

        jLabel6.setFont(new java.awt.Font("PT Serif", 0, 18)); // NOI18N
```

```
        jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel6.setText("Width");

        widthf.setEditable(false);

        lengthf.setEditable(false);

        jLabel8.setFont(new java.awt.Font("PT Serif", 0, 18)); // NOI18N
        jLabel8.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel8.setText("Length");

        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(40, 40, 40)
                .addComponent(jLabel8)
                .addContainerGap(98, Short.MAX_VALUE))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGap(34, 34, 34)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(widthf, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(lengthf, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addContainerGap(34, Short.MAX_VALUE)))
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
                .addContainerGap(95, Short.MAX_VALUE)
                .addComponent(jLabel8)
                .addGap(57, 57, 57))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGap(28, 28, 28)
```

```
                .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(0, 0, 0)
                .addComponent(widthf, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(40, 40, 40)
                .addComponent(lengthf, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(28, Short.MAX_VALUE)))
        );

        jPanel2.setBackground(new java.awt.Color(255, 255, 255));
        jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder("Insert Parameter"));

        jLabel5.setFont(new java.awt.Font("PT Serif", 0, 18)); // NOI18N
        jLabel5.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel5.setText("w");

        jLabel4.setFont(new java.awt.Font("PT Serif", 0, 18)); // NOI18N
        jLabel4.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel4.setText("delta");

        jLabel3.setFont(new java.awt.Font("PT Serif", 0, 18)); // NOI18N
        jLabel3.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        jLabel3.setText("omega");

        javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
        jPanel2.setLayout(jPanel2Layout);
        jPanel2Layout.setHorizontalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addContainerGap()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 19,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(72, Short.MAX_VALUE))

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(9, 9, 9)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(wfill, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(ofill, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(dfill, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(9, Short.MAX_VALUE)))
    );
    jPanel2Layout.setVerticalGroup(
       jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addGroup(jPanel2Layout.createSequentialGroup()
          .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE)
          .addGap(48, 48, 48)
          .addComponent(jLabel3)
          .addGap(0, 114, Short.MAX_VALUE))

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
          .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(18, 18, 18)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel2Layout.createSequentialGroup()
                   .addComponent(wfill, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                   .addGap(40, 40, 40)
                   .addComponent(ofill, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                   .addGap(40, 40, 40)
                   .addComponent(dfill, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(jPanel2Layout.createSequentialGroup()
                   .addGap(120, 120, 120)
                   .addComponent(jLabel4)))
            .addContainerGap(18, Short.MAX_VALUE)))
    );

    butcalc.setText("Calculate");
    butcalc.addMouseListener(new java.awt.event.MouseAdapter() {
       public void mouseClicked(java.awt.event.MouseEvent evt) {
```

```
            butcalcMouseClicked(evt);
        }
    });

    resultfill.setEditable(false);
    resultfill.setFont(new java.awt.Font("Lucida Grande", 0, 14)); // NOI18N
    resultfill.setHorizontalAlignment(javax.swing.JTextField.CENTER);

    jLabel7.setFont(new java.awt.Font("Chalkduster", 0, 36)); // NOI18N
    jLabel7.setForeground(new java.awt.Color(255, 255, 255));
    jLabel7.setText("dip parallel to slope");

    jButton1.setFont(new java.awt.Font("Lucida Grande", 0, 18)); // NOI18N
    jButton1.setText("X");
    jButton1.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jButton1MouseClicked(evt);
        }
    });

    javax.swing.GroupLayout curvesPanel1Layout = new
javax.swing.GroupLayout(curvesPanel1);
    curvesPanel1.setLayout(curvesPanel1Layout);
    curvesPanel1Layout.setHorizontalGroup(
        curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(curvesPanel1Layout.createSequentialGroup()
            .addGap(248, 248, 248)
            .addComponent(jLabel7)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 202,
Short.MAX_VALUE)
            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 47,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(14, 14, 14))

.addGroup(curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
            .addGroup(curvesPanel1Layout.createSequentialGroup()
                .addGap(0, 0, Short.MAX_VALUE)
                .addComponent(jLabel2)
                .addGap(22, 22, 22)

.addGroup(curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                    .addGroup(curvesPanel1Layout.createSequentialGroup()
```

```
                    .addGap(60, 60, 60)
                    .addComponent(jRadioButton1))
                .addGroup(curvesPanel1Layout.createSequentialGroup()
                    .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(20, 20, 20)

.addGroup(curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGroup(curvesPanel1Layout.createSequentialGroup()
                            .addGap(40, 40, 40)
                            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE))))
                .addGroup(curvesPanel1Layout.createSequentialGroup()
                    .addGap(130, 130, 130)
                    .addComponent(butcalc, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(curvesPanel1Layout.createSequentialGroup()
                    .addGap(110, 110, 110)
                    .addComponent(resultfill, javax.swing.GroupLayout.PREFERRED_SIZE, 130,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(0, 0, Short.MAX_VALUE)))
    );
    curvesPanel1Layout.setVerticalGroup(
        curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(curvesPanel1Layout.createSequentialGroup()

.addGroup(curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
            .addGroup(curvesPanel1Layout.createSequentialGroup()
                .addGap(40, 40, 40)
                .addComponent(jLabel7))
            .addGroup(curvesPanel1Layout.createSequentialGroup()
                .addGap(15, 15, 15)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 41,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(523, Short.MAX_VALUE))

.addGroup(curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
        .addGroup(curvesPanel1Layout.createSequentialGroup()
            .addGap(0, 0, Short.MAX_VALUE)
```

```
.addGroup(curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                .addComponent(jLabel2)
                .addGroup(curvesPanel1Layout.createSequentialGroup()
                  .addGap(10, 10, 10)
                  .addComponent(jRadioButton1)
                  .addGap(11, 11, 11)

.addGroup(curvesPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADI
NG)
                    .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(curvesPanel1Layout.createSequentialGroup()
                      .addGap(100, 100, 100)
                      .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(30, 30, 30)
                .addComponent(butcalc, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(9, 9, 9)
                .addComponent(resultfill, javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(0, 0, Short.MAX_VALUE)))
    );

    jPanel3.add(curvesPanel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 940,
610));

    getContentPane().add(jPanel3, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1,
610));

    pack();
    setLocationRelativeTo(null);
  }// </editor-fold>

  private void jRadioButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    lengthf.setEditable(true);
    widthf.setEditable(true);
  }

  private void butcalcMouseClicked(java.awt.event.MouseEvent evt) {
```

```
formula formula = new formula(Double.parseDouble(ofill.getText()),
                        Double.parseDouble(dfill.getText()),
                        Double.parseDouble(wfill.getText()));
DecimalFormat df = new DecimalFormat("#.##");
double rst = formula.calc1();
resultfill.setText(String.valueOf(df.format(rst)));

if (jRadioButton1.isSelected()) {
   volumeformula volumeFormula = new volumeformula(Double.parseDouble(ofill.getText()),
                                    Double.parseDouble(dfill.getText()),
                                    Double.parseDouble(wfill.getText()),
                                    Double.parseDouble(lengthf.getText()),
                                    Double.parseDouble(widthf.getText()));
   rst = volumeFormula.volume(rst);
   resultfill.setText(String.valueOf(df.format(rst)));
}

   }

   private void jButton1MouseClicked(java.awt.event.MouseEvent evt) {
      this.dispose();


   }

   /**
    * @param args the command line arguments
    */
   public static void main(String args[]) {
      /* Set the Nimbus look and feel */
      //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
      /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
       * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
       */
      try {
         for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
               javax.swing.UIManager.setLookAndFeel(info.getClassName());
               break;
            }
         }
      } catch (ClassNotFoundException ex) {
```

```
java.util.logging.Logger.getLogger(Cal1.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Cal1.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Cal1.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Cal1.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
        }
        //</editor-fold>

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Cal1().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    private com.coals.swing.Button butcalc;
    private com.coals.swing.CurvesPanel curvesPanel1;
    private javax.swing.JTextField dfill;
    private javax.swing.JButton jButton1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JPanel jPanel3;
    private javax.swing.JRadioButton jRadioButton1;
    private javax.swing.JTextField lengthf;
```

```
    private javax.swing.JTextField ofill;
    private javax.swing.JTextField resultfill;
    private javax.swing.JTextField wfill;
    private javax.swing.JTextField widthf;
    // End of variables declaration
}
```

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this
license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.coals.event;

import java.io.File;
import java.io.FileOutputStream;
import java.text.DecimalFormat;
import java.util.ArrayList;
import java.util.List;
import org.apache.poi.xwpf.usermodel.XWPFDocument;
import org.apache.poi.xwpf.usermodel.XWPFParagraph;
import org.apache.poi.xwpf.usermodel.XWPFTable;
import org.apache.poi.xwpf.usermodel.XWPFTableRow;
import org.openxmlformats.schemas.wordprocessingml.x2006.main.CTPageSz;
import org.openxmlformats.schemas.wordprocessingml.x2006.main.STPageOrientation;




/**
 *
 * @author xymbol
 */
public class PrintDoc {
   public void createWordDocument(String title, List<List<Double>> arr, double[] com, double[]
ratio) {
   // Create a new Word document
   XWPFDocument doc = new XWPFDocument();
   // Get the document's default page size
   DecimalFormat df = new DecimalFormat("#.##");
   CTPageSz pageSize = doc.getDocument().getBody().addNewSectPr().addNewPgSz();
   pageSize.setOrient(STPageOrientation.LANDSCAPE);
   XWPFParagraph paragraph = doc.createParagraph();

   // Create a new table in the document
   XWPFTable table = doc.createTable();

   // Add the data from the array to the table
   String[] data = {"Materials", "Ratio", "TM \n%AR", "IM\n%ADB", "ASH\n%ADB",
      "ASH\n%DB", "VM\n%ADB", "FC\n%ADB", "TS\n%ADB", "TS\n%AR", "CV\n%ADB",
"CV\nar"};
```

```
    XWPFTableRow headerRow = table.createRow();
    for (int i = 0; i < data.length; i++) {
        headerRow.createCell().setText(data[i]);
        headerRow.getCell(i).getParagraphs().get(0).createRun().setBold(true);}
    for (int i = 0; i < ratio.length; i++) {
        ratio[i] = Double.valueOf(df.format(ratio[i]));}
    String[] stringArray = new String[ratio.length];
    for (int i = 0; i < ratio.length; i++) {
        stringArray[i] = String.valueOf(ratio[i]);
    }
    String[][] header = {
        {"Coal 1", ""},
        {"Coal 2", ""},
        {"Coal 3", ""},};
    for (int i = 0; i < header.length; i++) {
        header[i][1] = stringArray[i];}
    for (int i = 0; i < header.length; i++) {
        XWPFTableRow row = table.createRow();
        row.createCell().setText(String.valueOf(header[i][0]));
        row.createCell().setText(String.valueOf(header[i][1]));
        for (int j = 0; j < arr.get(i).size(); j++) {
            row.createCell().setText(df.format(arr.get(i).get(j)));
        }
    }
    XWPFTableRow row = table.createRow();
    for (int i = -1; i < com.length; i++) {
        if(i == -1) {
            row.createCell().setText(("composite"));
        } else {
            row.createCell().setText(String.valueOf(df.format(com[i])));
        }
    }
    // Save the document
    try {
        FileOutputStream out = new FileOutputStream(new File("result.docx"));
        doc.write(out);
        out.close();
        doc.close();
    } catch (Exception e) {
        e.printStackTrace();
    }
}

}
```

```
package com.coals.event;

import java.io.File;
import java.io.FileInputStream;
import java.io.IOException;

import org.apache.poi.xwpf.usermodel.XWPFTable;
import org.apache.poi.xwpf.usermodel.XWPFTableRow;
import org.apache.poi.xwpf.usermodel.XWPFDocument;

import java.util.LinkedList;
import javax.swing.JOptionPane;

public class ReadDoc {

    public static class Queue<T> {
        private LinkedList<T> queue;

        public Queue() {
            queue = new LinkedList<>();
        }

        public void enqueue(T item) {
            queue.addLast(item);
        }

        public T dequeue() {
            if (isEmpty()) {
                throw new RuntimeException("Queue is empty");
            }
            return queue.removeFirst();
        }

        public T peek() {
            if (isEmpty()) {
                throw new RuntimeException("Queue is empty");
            }
            return queue.getFirst();
        }

        public boolean isEmpty() {
            return queue.isEmpty();
        }
```

```
    public int size() {
      return queue.size();
    }
  }

  private double[][][] data;

  public static double[][][] readTablesFromWordDocument(String fileName) {
    try {
      // Open the Word document
      File file = new File(fileName);
      double[][][] data;
      try (FileInputStream fis = new FileInputStream(file); XWPFDocument docx = new
XWPFDocument(fis)) {
        // Use a Queue to keep track of the tables to process
        Queue<XWPFTable> queue = new Queue<>();
        int tableCount = docx.getTables().size();
        data = new double[tableCount][][];

        // Enqueue each table in the document
        for (XWPFTable table : docx.getTables()) {
          queue.enqueue(table);
        }

        int tableIndex = 0;

        // Process tables in the order they were encountered in the document
        while (!queue.isEmpty()) {
          XWPFTable table = queue.dequeue();

          // Get the number of rows and columns in the table
          int rows = table.getRows().size();
          int cols = table.getRow(0).getTableCells().size();

          // Create a 2D array to store the table data
          data[tableIndex] = new double[rows][cols];

          // Loop through all rows in the table
          for (int i = 0; i < rows; i++) {
            XWPFTableRow row = table.getRow(i);

            String cellText = row.getCell(0).getText();
            if (!cellText.matches("-?\\d+(\\.\\d+)?")) {
              continue;
```

```
                }

                // Loop through all cells in the row
                for (int j = 0; j < cols; j++) {
                    cellText = row.getCell(j).getText();
                    data[tableIndex][i][j] = Double.parseDouble(cellText);
                }
            }

            tableIndex++;
        }
    }

    return data;
  } catch (IOException e) {
    JOptionPane.showMessageDialog(null, ("Error opening file: " + e.getMessage()));
    return null;
  }
 }

 public double[][][] getData() {
  return data;
 }
}
```

```
package com.coals.component;

import com.coals.model.Model_Card;
import java.awt.Color;
import java.awt.GradientPaint;
import java.awt.Graphics;
import java.awt.Graphics2D;
import java.awt.RenderingHints;

public class Card extends javax.swing.JPanel {

    public Color getColor1() {
        return color1;
    }

    public void setColor1(Color color1) {
        this.color1 = color1;
    }

    public Color getColor2() {
        return color2;
    }

    public void setColor2(Color color2) {
        this.color2 = color2;
    }

    private Color color1;
    private Color color2;

    public Card() {
        initComponents();
        setOpaque(false);
        color1 = Color.BLACK;
        color2 = Color.WHITE;
    }

    public void setData(Model_Card data) {
        lbIcon.setIcon(data.getIcon());
        lbTitle.setText(data.getTitle());
        lbValues.setText(data.getValues());

    }
```

```
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        lbIcon = new javax.swing.JLabel();
        lbTitle = new javax.swing.JLabel();
        lbValues = new javax.swing.JLabel();

        lbIcon.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/raven/icon/sayatan/1.png"))); // NOI18N

        lbTitle.setFont(new java.awt.Font("sansserif", 1, 14)); // NOI18N
        lbTitle.setForeground(new java.awt.Color(255, 255, 255));
        lbTitle.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        lbTitle.setText("Title");
        lbTitle.setToolTipText("");

        lbValues.setFont(new java.awt.Font("sansserif", 1, 18)); // NOI18N
        lbValues.setForeground(new java.awt.Color(255, 255, 255));
        lbValues.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
        lbValues.setText("Description");

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
        this.setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(lbIcon, javax.swing.GroupLayout.PREFERRED_SIZE, 160,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
                    .addComponent(lbTitle, javax.swing.GroupLayout.DEFAULT_SIZE, 139,
Short.MAX_VALUE)
                    .addComponent(lbValues, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addGap(11, 11, 11)
```

```
            .addComponent(lbTitle, javax.swing.GroupLayout.PREFERRED_SIZE, 63,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 52,
Short.MAX_VALUE)
            .addComponent(lbValues)
            .addGap(38, 38, 38))
         .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(lbIcon)
            .addGap(28, 28, 28))
      );
   }// </editor-fold>

   @Override
   protected void paintComponent(Graphics grphcs) {
      Graphics2D g2 = (Graphics2D) grphcs;
      g2.setRenderingHint(RenderingHints.KEY_ANTIALIASING,
RenderingHints.VALUE_ANTIALIAS_ON);
      GradientPaint g = new GradientPaint(0, 0, color1, 0, getHeight(), color2);
      g2.setPaint(g);
      g2.fillRoundRect(0, 0, getWidth(), getHeight(), 15, 15);
      g2.setColor(new Color(255, 255, 255, 50));
      g2.fillOval(getWidth() - (getHeight() / 2), 10, getHeight(), getHeight());
      g2.fillOval(getWidth() - (getHeight() / 2) - 20, getHeight() / 2 + 20, getHeight(), getHeight());
      super.paintComponent(grphcs);
   }

   // Variables declaration - do not modify
   private javax.swing.JLabel lbIcon;
   private javax.swing.JLabel lbTitle;
   private javax.swing.JLabel lbValues;
   // End of variables declaration
}
```

```
package com.coals.component;

import com.coals.event.EventMenuSelected;
import com.coals.model.Model_Menu;
import java.awt.Color;
import java.awt.GradientPaint;
import java.awt.Graphics;
import java.awt.Graphics2D;
import java.awt.RenderingHints;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.awt.event.MouseMotionAdapter;
import javax.swing.JFrame;

public class Menu extends javax.swing.JPanel {

    private EventMenuSelected event;

    public void addEventMenuSelected(EventMenuSelected event) {
        this.event = event;
        listMenu1.addEventMenuSelected(event);
    }

    public Menu() {
        initComponents();
        setOpaque(false);
        listMenu1.setOpaque(false);
        init();
    }

    private void init() {
        listMenu1.addItem(new Model_Menu("1", "Coal Actual Volume",
Model_Menu.MenuType.MENU));
        listMenu1.addItem(new Model_Menu("2", "Coal Blending",
Model_Menu.MenuType.MENU));
        listMenu1.addItem(new Model_Menu("3", "About", Model_Menu.MenuType.MENU));
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jFileChooser1 = new javax.swing.JFileChooser();
        menuBar1 = new java.awt.MenuBar();
```

```
        menu1 = new java.awt.Menu();
        menu2 = new java.awt.Menu();
        panelMoving = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        listMenu1 = new com.coals.swing.ListMenu<>();

        menu1.setLabel("File");
        menuBar1.add(menu1);

        menu2.setLabel("Edit");
        menuBar1.add(menu2);

        panelMoving.setOpaque(false);

        jLabel1.setFont(new java.awt.Font("sansserif", 1, 18)); // NOI18N
        jLabel1.setForeground(new java.awt.Color(255, 255, 255));
        jLabel1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/raven/icon/logo.png"))); // NOI18N
        jLabel1.setText("Coal Calculator");

        javax.swing.GroupLayout panelMovingLayout = new
javax.swing.GroupLayout(panelMoving);
        panelMoving.setLayout(panelMovingLayout);
        panelMovingLayout.setHorizontalGroup(
            panelMovingLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(panelMovingLayout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, 203,
Short.MAX_VALUE)
                .addContainerGap())
        );
        panelMovingLayout.setVerticalGroup(
            panelMovingLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
panelMovingLayout.createSequentialGroup()
                .addGap(15, 15, 15)
                .addComponent(jLabel1)
                .addContainerGap())
        );

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
        this.setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addComponent(panelMoving, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(listMenu1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(panelMoving, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(15, 15, 15)
                .addComponent(listMenu1, javax.swing.GroupLayout.DEFAULT_SIZE, 414,
Short.MAX_VALUE))
        );
    }// </editor-fold>

    @Override
    protected void paintChildren(Graphics grphcs) {
        Graphics2D g2 = (Graphics2D) grphcs;
        g2.setRenderingHint(RenderingHints.KEY_ANTIALIASING,
RenderingHints.VALUE_ANTIALIAS_ON);
        GradientPaint g = new GradientPaint(0, 0, Color.decode("#1CB5E0"), 0, getHeight(),
Color.decode("#000046"));
        g2.setPaint(g);
        g2.fillRoundRect(0, 0, getWidth(), getHeight(), 15, 15);
        g2.fillRect(getWidth() - 20, 0, getWidth(), getHeight());
        super.paintChildren(grphcs);
    }

    private int x;
    private int y;

    public void initMoving(JFrame fram) {
        panelMoving.addMouseListener(new MouseAdapter() {
            @Override
            public void mousePressed(MouseEvent me) {
                x = me.getX();
                y = me.getY();
            }

        });
        panelMoving.addMouseMotionListener(new MouseMotionAdapter() {
            @Override
            public void mouseDragged(MouseEvent me) {
```

```
            fram.setLocation(me.getXOnScreen() - x, me.getYOnScreen() - y);
        }
      });
    }

    // Variables declaration - do not modify
    private javax.swing.JFileChooser jFileChooser1;
    private javax.swing.JLabel jLabel1;
    private com.coals.swing.ListMenu<String> listMenu1;
    private java.awt.Menu menu1;
    private java.awt.Menu menu2;
    private java.awt.MenuBar menuBar1;
    private javax.swing.JPanel panelMoving;
    // End of variables declaration
}
```