EJERCICIO 1

AcercaDe.Form

```
<?xml version="1.0" encoding="UTF-8" ?>

<Form version="1.3" maxVersion="1.9"
type="org.netbeans.modules.form.forminfo.JInternalFrameFormInfo">
  <Properties>
    <Property name="title" type="java.lang.String" value="Acerca de"/>
  </Properties>
  <SyntheticProperties>
    <SyntheticProperty name="formSizePolicy" type="int" value="1"/>
  </SyntheticProperties>
  <AuxValues>
    <AuxValue name="FormSettings_autoResourcing" type="java.lang.Integer" value="0"/>
    <AuxValue name="FormSettings_autoSetComponentName" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_generateFQN" type="java.lang.Boolean" value="true"/>
    <AuxValue name="FormSettings_generateMnemonicsCode" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_i18nAutoMode" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_layoutCodeTarget" type="java.lang.Integer" value="1"/>
    <AuxValue name="FormSettings_listenerGenerationStyle" type="java.lang.Integer"
value="0"/>
    <AuxValue name="FormSettings_variablesLocal" type="java.lang.Boolean"
value="false"/>
    <AuxValue name="FormSettings_variablesModifier" type="java.lang.Integer" value="2"/>
  </AuxValues>

  <Layout>
    <DimensionLayout dim="0">
      <Group type="103" groupAlignment="0" attributes="0">
          <Group type="102" attributes="0">
              <Group type="103" groupAlignment="0" attributes="0">
                  <Group type="102" attributes="0">
                      <EmptySpace min="-2" pref="154" max="-2" attributes="0"/>
                      <Component id="jButton1" min="-2" max="-2" attributes="0"/>
                  </Group>
                  <Group type="102" alignment="0" attributes="0">
                      <EmptySpace min="-2" pref="54" max="-2" attributes="0"/>
                      <Component id="jScrollPane1" min="-2" pref="275" max="-2" attributes="0"/>
                  </Group>
              </Group>
              <EmptySpace pref="65" max="32767" attributes="0"/>
          </Group>
```

```
    </Group>
   </DimensionLayout>
   <DimensionLayout dim="1">
    <Group type="103" groupAlignment="0" attributes="0">
       <Group type="102" alignment="1" attributes="0">
          <EmptySpace min="-2" pref="45" max="-2" attributes="0"/>
          <Component id="jScrollPane1" min="-2" max="-2" attributes="0"/>
          <EmptySpace pref="89" max="32767" attributes="0"/>
          <Component id="jButton1" min="-2" max="-2" attributes="0"/>
          <EmptySpace min="-2" pref="31" max="-2" attributes="0"/>
       </Group>
    </Group>
   </DimensionLayout>
  </Layout>
  <SubComponents>
   <Component class="javax.swing.JButton" name="jButton1">
    <Properties>
     <Property name="text" type="java.lang.String" value="Salir"/>
    </Properties>
    <Events>
     <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="jButton1ActionPerformed"/>
    </Events>
   </Component>
   <Container class="javax.swing.JScrollPane" name="jScrollPane1">
    <AuxValues>
     <AuxValue name="autoScrollPane" type="java.lang.Boolean" value="true"/>
    </AuxValues>

    <Layout
class="org.netbeans.modules.form.compat2.layouts.support.JScrollPaneSupportLayout"/>
    <SubComponents>
     <Component class="javax.swing.JTextArea" name="jTextArea1">
      <Properties>
       <Property name="columns" type="int" value="20"/>
       <Property name="rows" type="int" value="5"/>
       <Property name="text" type="java.lang.String" value="Programa realizado por Juan
Camilo Torres&amp;#xa;y Juan Manel Perez Osorio usando lo aprendido&amp;#xa;en la clase 11 de
P.O.O."/>
      </Properties>
     </Component>
    </SubComponents>
   </Container>
  </SubComponents>
</Form>
```

AcercaDe.java

```
/*
```

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

/**
 *
 * @author Camilo
 */
public class AcercaDe extends javax.swing.JInternalFrame {

        /**
        * Creates new form AcercaDe
        */
        public AcercaDe() {
        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">//GEN-BEGIN:initComponents
        private void initComponents() {

        jButton1 = new javax.swing.JButton();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTextArea1 = new javax.swing.JTextArea();

        setTitle("Acerca de");

        jButton1.setText("Salir");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
        }
        });

        jTextArea1.setColumns(20);
        jTextArea1.setRows(5);
        jTextArea1.setText("Programa realizado por Juan Camilo Torres\ny Juan Manel
Perez Osorio usando lo aprendido\nen la clase 11 de P.O.O.");
        jScrollPane1.setViewportView(jTextArea1);
```

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addGap(154, 154, 154)
                .addComponent(jButton1))
                .addGroup(layout.createSequentialGroup()
                .addGap(54, 54, 54)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
275, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addContainerGap(65, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addGap(45, 45, 45)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
89, Short.MAX_VALUE)
                .addComponent(jButton1)
                .addGap(31, 31, 31))
        );

        pack();
        }// </editor-fold>//GEN-END:initComponents

        private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jButton1ActionPerformed
        this.dispose();
        }//GEN-LAST:event_jButton1ActionPerformed


        // Variables declaration - do not modify//GEN-BEGIN:variables
        private javax.swing.JButton jButton1;
        private javax.swing.JScrollPane jScrollPane1;
        private javax.swing.JTextArea jTextArea1;
        // End of variables declaration//GEN-END:variables
}
```

Current.java

```
package Menus;
```

```
public class Current {
public static double calc_current(double voltage, double resistance){
        double current;
        current = voltage/resistance;
        return current;
}
}
```

CurrentForm.form

```
<?xml version="1.0" encoding="UTF-8" ?>

<Form version="1.3" maxVersion="1.9"
type="org.netbeans.modules.form.forminfo.JInternalFrameFormInfo">
  <Properties>
        <Property name="title" type="java.lang.String" value="Calcular Corriente"/>
  </Properties>
  <SyntheticProperties>
        <SyntheticProperty name="formSizePolicy" type="int" value="1"/>
  </SyntheticProperties>
  <AuxValues>
        <AuxValue name="FormSettings_autoResourcing" type="java.lang.Integer"
value="0"/>
        <AuxValue name="FormSettings_autoSetComponentName"
type="java.lang.Boolean" value="false"/>
        <AuxValue name="FormSettings_generateFQN" type="java.lang.Boolean"
value="true"/>
        <AuxValue name="FormSettings_generateMnemonicsCode"
type="java.lang.Boolean" value="false"/>
        <AuxValue name="FormSettings_i18nAutoMode" type="java.lang.Boolean"
value="false"/>
        <AuxValue name="FormSettings_layoutCodeTarget" type="java.lang.Integer"
value="1"/>
        <AuxValue name="FormSettings_listenerGenerationStyle" type="java.lang.Integer"
value="0"/>
        <AuxValue name="FormSettings_variablesLocal" type="java.lang.Boolean"
value="false"/>
        <AuxValue name="FormSettings_variablesModifier" type="java.lang.Integer"
value="2"/>
  </AuxValues>

  <Layout>
        <DimensionLayout dim="0">
        <Group type="103" groupAlignment="0" attributes="0">
        <Group type="102" alignment="0" attributes="0">
        <EmptySpace min="-2" pref="39" max="-2" attributes="0"/>
        <Component id="btnCalc" min="-2" max="-2" attributes="0"/>
        <EmptySpace min="-2" pref="50" max="-2" attributes="0"/>
        <Component id="btnDel" min="-2" max="-2" attributes="0"/>
```

```
        <EmptySpace pref="50" max="32767" attributes="0"/>
        <Component id="btnExit" min="-2" max="-2" attributes="0"/>
        <EmptySpace min="-2" pref="38" max="-2" attributes="0"/>
        </Group>
        <Group type="102" alignment="0" attributes="0">
        <EmptySpace min="-2" pref="73" max="-2" attributes="0"/>
        <Group type="103" groupAlignment="0" max="-2" attributes="0">
                <Group type="102" alignment="0" attributes="0">
                <Component id="jLabel3" min="-2" max="-2" attributes="0"/>
                <EmptySpace type="separate" max="-2" attributes="0"/>
                <Component id="txtCurrent" min="-2" pref="180" max="-2" attributes="0"/>
                </Group>
                <Group type="102" alignment="0" attributes="0">
                <Component id="jLabel2" min="-2" max="-2" attributes="0"/>
                <EmptySpace type="separate" max="-2" attributes="0"/>
                <Component id="txtResistance" max="32767" attributes="0"/>
                </Group>
                <Group type="102" alignment="0" attributes="0">
                <Component id="jLabel1" min="-2" max="-2" attributes="0"/>
                <EmptySpace type="separate" max="-2" attributes="0"/>
                <Component id="txtVoltage" max="32767" attributes="0"/>
                </Group>
        </Group>
        <EmptySpace max="32767" attributes="0"/>
        </Group>
        </Group>
        </DimensionLayout>
        <DimensionLayout dim="1">
        <Group type="103" groupAlignment="0" attributes="0">
        <Group type="102" alignment="0" attributes="0">
        <EmptySpace min="-2" pref="44" max="-2" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
                <Component id="jLabel1" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="txtVoltage" alignment="3" min="-2" max="-2" attributes="0"/>
        </Group>
        <EmptySpace type="separate" max="-2" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
                <Component id="jLabel2" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="txtResistance" alignment="3" min="-2" max="-2"
attributes="0"/>
        </Group>
        <EmptySpace type="separate" max="-2" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
                <Component id="jLabel3" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="txtCurrent" alignment="3" min="-2" max="-2" attributes="0"/>
        </Group>
        <EmptySpace pref="74" max="32767" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
```

```
                <Component id="btnCalc" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="btnDel" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="btnExit" alignment="3" min="-2" max="-2" attributes="0"/>
            </Group>
            <EmptySpace min="-2" pref="31" max="-2" attributes="0"/>
            </Group>
            </Group>
            </DimensionLayout>
    </Layout>
    <SubComponents>
            <Component class="javax.swing.JLabel" name="jLabel1">
            <Properties>
            <Property name="text" type="java.lang.String" value="Voltaje"/>
            </Properties>
            </Component>
            <Component class="javax.swing.JLabel" name="jLabel2">
            <Properties>
            <Property name="text" type="java.lang.String" value="Resistencia"/>
            </Properties>
            </Component>
            <Component class="javax.swing.JLabel" name="jLabel3">
            <Properties>
            <Property name="text" type="java.lang.String" value="Corriente"/>
            </Properties>
            </Component>
            <Component class="javax.swing.JTextField" name="txtVoltage">
            <Events>
            <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="txtVoltageActionPerformed"/>
            </Events>
            </Component>
            <Component class="javax.swing.JTextField" name="txtResistance">
            <Events>
            <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="txtResistanceActionPerformed"/>
            </Events>
            </Component>
            <Component class="javax.swing.JTextField" name="txtCurrent">
            </Component>
            <Component class="javax.swing.JButton" name="btnCalc">
            <Properties>
            <Property name="text" type="java.lang.String" value="Calcular"/>
            </Properties>
            <Events>
            <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="btnCalcActionPerformed"/>
            </Events>
            </Component>
```

```
        <Component class="javax.swing.JButton" name="btnDel">
        <Properties>
        <Property name="text" type="java.lang.String" value="Borrar"/>
        </Properties>
        <Events>
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="btnDelActionPerformed"/>
        </Events>
        </Component>
        <Component class="javax.swing.JButton" name="btnExit">
        <Properties>
        <Property name="text" type="java.lang.String" value="Salir"/>
        </Properties>
        <Events>
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="btnExitActionPerformed"/>
        </Events>
        </Component>
  </SubComponents>
</Form>
```

CurrentForm.java

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

/**
 *
 * @author Camilo
 */
public class CurrentForm extends javax.swing.JInternalFrame {

        /**
        * Creates new form CurrentForm
        */
        public CurrentForm() {
        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">//GEN-BEGIN:initComponents
        private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        txtVoltage = new javax.swing.JTextField();
        txtResistance = new javax.swing.JTextField();
        txtCurrent = new javax.swing.JTextField();
        btnCalc = new javax.swing.JButton();
        btnDel = new javax.swing.JButton();
        btnExit = new javax.swing.JButton();

        setTitle("Calcular Corriente");

        jLabel1.setText("Voltaje");

        jLabel2.setText("Resistencia");

        jLabel3.setText("Corriente");

        txtVoltage.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                txtVoltageActionPerformed(evt);
        }
        });

        txtResistance.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                txtResistanceActionPerformed(evt);
        }
        });

        btnCalc.setText("Calcular");
        btnCalc.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnCalcActionPerformed(evt);
        }
        });

        btnDel.setText("Borrar");
        btnDel.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnDelActionPerformed(evt);
        }
        });
```

```
        btnExit.setText("Salir");
        btnExit.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnExitActionPerformed(evt);
        }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(39, 39, 39)
                .addComponent(btnCalc)
                .addGap(50, 50, 50)
                .addComponent(btnDel)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
50, Short.MAX_VALUE)
                .addComponent(btnExit)
                .addGap(38, 38, 38))
        .addGroup(layout.createSequentialGroup()
                .addGap(73, 73, 73)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel3)
                .addGap(18, 18, 18)
                .addComponent(txtCurrent, javax.swing.GroupLayout.PREFERRED_SIZE,
180, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel2)
                .addGap(18, 18, 18)
                .addComponent(txtResistance))
                .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel1)
                .addGap(18, 18, 18)
                .addComponent(txtVoltage)))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(44, 44, 44)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
```

```
                .addComponent(txtVoltage, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(txtResistance,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(txtCurrent, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
74, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(btnCalc)
                .addComponent(btnDel)
                .addComponent(btnExit))
                .addGap(31, 31, 31))
        );

        pack();
        }// </editor-fold>//GEN-END:initComponents

        private void txtVoltageActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_txtVoltageActionPerformed
        // TODO add your handling code here:
        }//GEN-LAST:event_txtVoltageActionPerformed

        private void txtResistanceActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_txtResistanceActionPerformed
        // TODO add your handling code here:
        }//GEN-LAST:event_txtResistanceActionPerformed

        private void btnCalcActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnCalcActionPerformed
        double current, resistance, voltage;
        voltage = Double.parseDouble(txtVoltage.getText());
        resistance = Double.parseDouble(txtResistance.getText());
        current = Current.calc_current(voltage, resistance);
        txtCurrent.setText(String.valueOf(current));
        }//GEN-LAST:event_btnCalcActionPerformed
```

```
        private void btnDelActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnDelActionPerformed
        double current, resistance, voltage;
        current=0;
        resistance=0;
        voltage=0;
        txtCurrent.setText("");
        txtResistance.setText("");
        txtVoltage.setText("");
        }//GEN-LAST:event_btnDelActionPerformed

        private void btnExitActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnExitActionPerformed
        this.dispose();
        }//GEN-LAST:event_btnExitActionPerformed


        // Variables declaration - do not modify//GEN-BEGIN:variables
        private javax.swing.JButton btnCalc;
        private javax.swing.JButton btnDel;
        private javax.swing.JButton btnExit;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel2;
        private javax.swing.JLabel jLabel3;
        private javax.swing.JTextField txtCurrent;
        private javax.swing.JTextField txtResistance;
        private javax.swing.JTextField txtVoltage;
        // End of variables declaration//GEN-END:variables
}
```

MainForm.form

```
<?xml version="1.0" encoding="UTF-8" ?>

<Form version="1.3" maxVersion="1.9"
type="org.netbeans.modules.form.forminfo.JFrameFormInfo">
  <NonVisualComponents>
        <Container class="javax.swing.JMenu" name="jMenu1">
        <Properties>
        <Property name="text" type="java.lang.String" value="jMenu1"/>
        </Properties>

        <Layout
class="org.netbeans.modules.form.compat2.layouts.DesignAbsoluteLayout">
        <Property name="useNullLayout" type="boolean" value="true"/>
        </Layout>
        </Container>
        <Container class="javax.swing.JMenu" name="jMenu2">
        <Properties>
```

```
        <Property name="text" type="java.lang.String" value="jMenu2"/>
        </Properties>

        <Layout
class="org.netbeans.modules.form.compat2.layouts.DesignAbsoluteLayout">
        <Property name="useNullLayout" type="boolean" value="true"/>
        </Layout>
        </Container>
        <Menu class="javax.swing.JMenuBar" name="jMenuBar1">
        <SubComponents>
        <Menu class="javax.swing.JMenu" name="jMenu3">
        <Properties>
        <Property name="text" type="java.lang.String" value="Archivo"/>
        </Properties>
        <SubComponents>
        <MenuItem class="javax.swing.JMenuItem" name="jMenuItem1">
        <Properties>
                <Property name="text" type="java.lang.String" value="Salir"/>
        </Properties>
        <Events>
                <EventHandler event="actionPerformed"
listener="java.awt.event.ActionListener" parameters="java.awt.event.ActionEvent"
handler="jMenuItem1ActionPerformed"/>
        </Events>
        </MenuItem>
        </SubComponents>
        </Menu>
        <Menu class="javax.swing.JMenu" name="jMenu4">
        <Properties>
        <Property name="text" type="java.lang.String" value="Pitagoras"/>
        </Properties>
        <SubComponents>
        <MenuItem class="javax.swing.JMenuItem" name="jMenuItem2">
        <Properties>
                <Property name="text" type="java.lang.String" value="Calcular
Pit&#xe1;goras"/>
        </Properties>
        <Events>
                <EventHandler event="actionPerformed"
listener="java.awt.event.ActionListener" parameters="java.awt.event.ActionEvent"
handler="jMenuItem2ActionPerformed"/>
        </Events>
        </MenuItem>
        </SubComponents>
        </Menu>
        <Menu class="javax.swing.JMenu" name="jMenu5">
        <Properties>
        <Property name="text" type="java.lang.String" value="Ohm"/>
```

```
        </Properties>
        <SubComponents>
        <MenuItem class="javax.swing.JMenuItem" name="jMenuItem3">
        <Properties>
                <Property name="text" type="java.lang.String" value="Calcular Voltaje"/>
        </Properties>
        <Events>
                <EventHandler event="actionPerformed"
listener="java.awt.event.ActionListener" parameters="java.awt.event.ActionEvent"
handler="jMenuItem3ActionPerformed"/>
        </Events>
        </MenuItem>
        <MenuItem class="javax.swing.JMenuItem" name="jMenuItem4">
        <Properties>
                <Property name="text" type="java.lang.String" value="Calcular Corriente"/>
        </Properties>
        <Events>
                <EventHandler event="actionPerformed"
listener="java.awt.event.ActionListener" parameters="java.awt.event.ActionEvent"
handler="jMenuItem4ActionPerformed"/>
        </Events>
        </MenuItem>
        </SubComponents>
        </Menu>
        <Menu class="javax.swing.JMenu" name="jMenu6">
        <Properties>
        <Property name="text" type="java.lang.String" value="Acerca"/>
        </Properties>
        <SubComponents>
        <MenuItem class="javax.swing.JMenuItem" name="jMenuItem5">
        <Properties>
                <Property name="text" type="java.lang.String" value="Acerca de"/>
        </Properties>
        <Events>
                <EventHandler event="actionPerformed"
listener="java.awt.event.ActionListener" parameters="java.awt.event.ActionEvent"
handler="jMenuItem5ActionPerformed"/>
        </Events>
        </MenuItem>
        </SubComponents>
        </Menu>
        </SubComponents>
        </Menu>
  </NonVisualComponents>
  <Properties>
        <Property name="defaultCloseOperation" type="int" value="3"/>
        <Property name="title" type="java.lang.String" value="App"/>
  </Properties>
```

```
  <SyntheticProperties>
        <SyntheticProperty name="menuBar" type="java.lang.String" value="jMenuBar1"/>
        <SyntheticProperty name="formSizePolicy" type="int" value="1"/>
        <SyntheticProperty name="generateCenter" type="boolean" value="false"/>
  </SyntheticProperties>
  <AuxValues>
        <AuxValue name="FormSettings_autoResourcing" type="java.lang.Integer"
value="0"/>
        <AuxValue name="FormSettings_autoSetComponentName"
type="java.lang.Boolean" value="false"/>
        <AuxValue name="FormSettings_generateFQN" type="java.lang.Boolean"
value="true"/>
        <AuxValue name="FormSettings_generateMnemonicsCode"
type="java.lang.Boolean" value="false"/>
        <AuxValue name="FormSettings_i18nAutoMode" type="java.lang.Boolean"
value="false"/>
        <AuxValue name="FormSettings_layoutCodeTarget" type="java.lang.Integer"
value="1"/>
        <AuxValue name="FormSettings_listenerGenerationStyle" type="java.lang.Integer"
value="0"/>
        <AuxValue name="FormSettings_variablesLocal" type="java.lang.Boolean"
value="false"/>
        <AuxValue name="FormSettings_variablesModifier" type="java.lang.Integer"
value="2"/>
  </AuxValues>

  <Layout>
        <DimensionLayout dim="0">
        <Group type="103" groupAlignment="0" attributes="0">
        <Component id="DP" alignment="0" max="32767" attributes="0"/>
        </Group>
        </DimensionLayout>
        <DimensionLayout dim="1">
        <Group type="103" groupAlignment="0" attributes="0">
        <Component id="DP" alignment="0" max="32767" attributes="0"/>
        </Group>
        </DimensionLayout>
  </Layout>
  <SubComponents>
        <Container class="javax.swing.JDesktopPane" name="DP">
        <Properties>
        <Property name="background" type="java.awt.Color"
editor="org.netbeans.beaninfo.editors.ColorEditor">
        <Color blue="ff" green="cc" red="99" type="rgb"/>
        </Property>
        </Properties>

        <Layout>
```

```
        <DimensionLayout dim="0">
        <Group type="103" groupAlignment="0" attributes="0">
        <EmptySpace min="0" pref="400" max="32767" attributes="0"/>
        </Group>
        </DimensionLayout>
        <DimensionLayout dim="1">
        <Group type="103" groupAlignment="0" attributes="0">
        <EmptySpace min="0" pref="278" max="32767" attributes="0"/>
        </Group>
        </DimensionLayout>
        </Layout>
        </Container>
  </SubComponents>
</Form>
```

MainForm.java

```
/*
 * 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 Menus;

/**
 *
 * @author Camilo
 */
public class MainForm extends javax.swing.JFrame {

        /**
        * Creates new form MainForm
        */
        public MainForm() {
        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">//GEN-BEGIN:initComponents
        private void initComponents() {

        jMenu1 = new javax.swing.JMenu();
```

```
jMenu2 = new javax.swing.JMenu();
DP = new javax.swing.JDesktopPane();
jMenuBar1 = new javax.swing.JMenuBar();
jMenu3 = new javax.swing.JMenu();
jMenuItem1 = new javax.swing.JMenuItem();
jMenu4 = new javax.swing.JMenu();
jMenuItem2 = new javax.swing.JMenuItem();
jMenu5 = new javax.swing.JMenu();
jMenuItem3 = new javax.swing.JMenuItem();
jMenuItem4 = new javax.swing.JMenuItem();
jMenu6 = new javax.swing.JMenu();
jMenuItem5 = new javax.swing.JMenuItem();

jMenu1.setText("jMenu1");

jMenu2.setText("jMenu2");

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setTitle("App");

DP.setBackground(new java.awt.Color(153, 204, 255));

javax.swing.GroupLayout DPLayout = new javax.swing.GroupLayout(DP);
DP.setLayout(DPLayout);
DPLayout.setHorizontalGroup(
DPLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addGap(0, 400, Short.MAX_VALUE)
);
DPLayout.setVerticalGroup(
DPLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addGap(0, 278, Short.MAX_VALUE)
);

jMenu3.setText("Archivo");

jMenuItem1.setText("Salir");
jMenuItem1.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem1ActionPerformed(evt);
}
});
jMenu3.add(jMenuItem1);

jMenuBar1.add(jMenu3);

jMenu4.setText("Pitagoras");

jMenuItem2.setText("Calcular Pitágoras");
```

```
jMenuItem2.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem2ActionPerformed(evt);
}
});
jMenu4.add(jMenuItem2);

jMenuBar1.add(jMenu4);

jMenu5.setText("Ohm");

jMenuItem3.setText("Calcular Voltaje");
jMenuItem3.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem3ActionPerformed(evt);
}
});
jMenu5.add(jMenuItem3);

jMenuItem4.setText("Calcular Corriente");
jMenuItem4.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem4ActionPerformed(evt);
}
});
jMenu5.add(jMenuItem4);

jMenuBar1.add(jMenu5);

jMenu6.setText("Acerca");

jMenuItem5.setText("Acerca de");
jMenuItem5.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem5ActionPerformed(evt);
}
});
jMenu6.add(jMenuItem5);

jMenuBar1.add(jMenu6);

setJMenuBar(jMenuBar1);

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

```
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(DP)
        );

        pack();
        }// </editor-fold>//GEN-END:initComponents

        private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jMenuItem1ActionPerformed
        this.dispose();
        }//GEN-LAST:event_jMenuItem1ActionPerformed

        private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jMenuItem2ActionPerformed
        PitForm pitagoras = new PitForm();
        DP.add(pitagoras);
        pitagoras.setVisible(true);
        }//GEN-LAST:event_jMenuItem2ActionPerformed

        private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jMenuItem3ActionPerformed
        VoltageForm voltage = new VoltageForm();
        DP.add(voltage);
        voltage.setVisible(true);
        }//GEN-LAST:event_jMenuItem3ActionPerformed

        private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jMenuItem4ActionPerformed
        CurrentForm current = new CurrentForm();
        DP.add(current);
        current.setVisible(true);
        }//GEN-LAST:event_jMenuItem4ActionPerformed

        private void jMenuItem5ActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_jMenuItem5ActionPerformed
        AcercaDe about = new AcercaDe();
        DP.add(about);
        about.setVisible(true);
        }//GEN-LAST:event_jMenuItem5ActionPerformed

        /**
        * @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(MainForm.class.getName()).log(java.util.logging.Level.SE
VERE, null, ex);
        } catch (InstantiationException ex) {

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

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

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

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

        // Variables declaration - do not modify//GEN-BEGIN:variables
        private javax.swing.JDesktopPane DP;
        private javax.swing.JMenu jMenu1;
        private javax.swing.JMenu jMenu2;
        private javax.swing.JMenu jMenu3;
        private javax.swing.JMenu jMenu4;
        private javax.swing.JMenu jMenu5;
        private javax.swing.JMenu jMenu6;
```

```
        private javax.swing.JMenuBar jMenuBar1;
        private javax.swing.JMenuItem jMenuItem1;
        private javax.swing.JMenuItem jMenuItem2;
        private javax.swing.JMenuItem jMenuItem3;
        private javax.swing.JMenuItem jMenuItem4;
        private javax.swing.JMenuItem jMenuItem5;
        // End of variables declaration//GEN-END:variables
}
```

Menus.java

```
package Menus;
import javax.swing.JFrame;

public class Menus {
        public static void main(String[] args) {
        MainForm Main = new MainForm();
        Main.setExtendedState(JFrame.MAXIMIZED_BOTH);
        Main.setVisible(true);
        }

}
```

PitForm.form

```
/*
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this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JInternalFrame.java to edit
this template
 */
package Menus;

/**
 *
 * @author Camilo
 */
public class PitForm extends javax.swing.JInternalFrame {

        /**
        * Creates new form PitForm
        */
        public PitForm() {
        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">//GEN-BEGIN:initComponents
        private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        txtHipotenusa = new javax.swing.JTextField();
        txtB = new javax.swing.JTextField();
        txtA = new javax.swing.JTextField();
        btnCalc = new javax.swing.JButton();
        btnDel = new javax.swing.JButton();
        btnExit = new javax.swing.JButton();

        setTitle("Calcular Hipotenusa");

        jLabel1.setText("Lado A");

        jLabel2.setText("Lado B");

        jLabel3.setText("Hipotenusa");

        txtA.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                txtAActionPerformed(evt);
        }
        });

        btnCalc.setText("Calcular");
        btnCalc.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnCalcActionPerformed(evt);
        }
        });

        btnDel.setText("Borrar");
        btnDel.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnDelActionPerformed(evt);
        }
        });

        btnExit.setText("Salir");
        btnExit.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnExitActionPerformed(evt);
```

```
        }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addGap(62, 62, 62)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel3)
                        .addGap(18, 18, 18)
                        .addComponent(txtHipotenusa))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel2)
                        .addGap(18, 18, 18)
                        .addComponent(txtB))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel1)
                        .addGap(18, 18, 18)
                        .addComponent(txtA, javax.swing.GroupLayout.PREFERRED_SIZE,
180, javax.swing.GroupLayout.PREFERRED_SIZE))))
                .addGroup(layout.createSequentialGroup()
                .addGap(39, 39, 39)
                .addComponent(btnCalc)
                .addGap(42, 42, 42)
                .addComponent(btnDel)
                .addGap(43, 43, 43)
                .addComponent(btnExit)))
                .addContainerGap(53, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(53, 53, 53)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(txtA, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
                .addComponent(jLabel2)
                .addComponent(txtB, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(txtHipotenusa,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
53, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(btnCalc)
                .addComponent(btnDel)
                .addComponent(btnExit))
                .addGap(43, 43, 43))
        );

        pack();
        }// </editor-fold>//GEN-END:initComponents

        private void txtAActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_txtAActionPerformed
        // TODO add your handling code here:
        }//GEN-LAST:event_txtAActionPerformed

        private void btnExitActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnExitActionPerformed
        this.dispose();
        }//GEN-LAST:event_btnExitActionPerformed

        private void btnDelActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnDelActionPerformed
        double hipotenusa, catetoA, catetoB;
        hipotenusa=0;
        catetoA=0;
        catetoB=0;
        txtA.setText("");
        txtB.setText("");
        txtHipotenusa.setText("");
        }//GEN-LAST:event_btnDelActionPerformed

        private void btnCalcActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnCalcActionPerformed
        double hipotenusa, catetoA, catetoB;
        catetoA = Double.parseDouble(txtA.getText());
```

```
        catetoB = Double.parseDouble(txtB.getText());
        hipotenusa = Pitagoras.calc_hipotenusa(catetoA, catetoB);
        txtHipotenusa.setText(String.valueOf(hipotenusa));
        }//GEN-LAST:event_btnCalcActionPerformed


        // Variables declaration - do not modify//GEN-BEGIN:variables
        private javax.swing.JButton btnCalc;
        private javax.swing.JButton btnDel;
        private javax.swing.JButton btnExit;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel2;
        private javax.swing.JLabel jLabel3;
        private javax.swing.JTextField txtA;
        private javax.swing.JTextField txtB;
        private javax.swing.JTextField txtHipotenusa;
        // End of variables declaration//GEN-END:variables
}
```

PitForm.java

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

/**
 *
 * @author Camilo
 */
public class PitForm extends javax.swing.JInternalFrame {

        /**
        * Creates new form PitForm
        */
        public PitForm() {
        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">//GEN-BEGIN:initComponents
        private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        txtHipotenusa = new javax.swing.JTextField();
        txtB = new javax.swing.JTextField();
        txtA = new javax.swing.JTextField();
        btnCalc = new javax.swing.JButton();
        btnDel = new javax.swing.JButton();
        btnExit = new javax.swing.JButton();

        setTitle("Calcular Hipotenusa");

        jLabel1.setText("Lado A");

        jLabel2.setText("Lado B");

        jLabel3.setText("Hipotenusa");

        txtA.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                txtAActionPerformed(evt);
        }
        });

        btnCalc.setText("Calcular");
        btnCalc.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnCalcActionPerformed(evt);
        }
        });

        btnDel.setText("Borrar");
        btnDel.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnDelActionPerformed(evt);
        }
        });

        btnExit.setText("Salir");
        btnExit.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnExitActionPerformed(evt);
        }
        });
```

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addGap(62, 62, 62)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel3)
                        .addGap(18, 18, 18)
                        .addComponent(txtHipotenusa))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel2)
                        .addGap(18, 18, 18)
                        .addComponent(txtB))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel1)
                        .addGap(18, 18, 18)
                        .addComponent(txtA, javax.swing.GroupLayout.PREFERRED_SIZE,
180, javax.swing.GroupLayout.PREFERRED_SIZE))))
                .addGroup(layout.createSequentialGroup()
                .addGap(39, 39, 39)
                .addComponent(btnCalc)
                .addGap(42, 42, 42)
                .addComponent(btnDel)
                .addGap(43, 43, 43)
                .addComponent(btnExit)))
                .addContainerGap(53, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(53, 53, 53)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(txtA, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
```

```
                .addComponent(txtB, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(txtHipotenusa,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
53, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(btnCalc)
                .addComponent(btnDel)
                .addComponent(btnExit))
                .addGap(43, 43, 43))
        );

        pack();
        }// </editor-fold>//GEN-END:initComponents

        private void txtAActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_txtAActionPerformed
        // TODO add your handling code here:
        }//GEN-LAST:event_txtAActionPerformed

        private void btnExitActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnExitActionPerformed
        this.dispose();
        }//GEN-LAST:event_btnExitActionPerformed

        private void btnDelActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnDelActionPerformed
        double hipotenusa, catetoA, catetoB;
        hipotenusa=0;
        catetoA=0;
        catetoB=0;
        txtA.setText("");
        txtB.setText("");
        txtHipotenusa.setText("");
        }//GEN-LAST:event_btnDelActionPerformed

        private void btnCalcActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnCalcActionPerformed
        double hipotenusa, catetoA, catetoB;
        catetoA = Double.parseDouble(txtA.getText());
        catetoB = Double.parseDouble(txtB.getText());
```

```
        hipotenusa = Pitagoras.calc_hipotenusa(catetoA, catetoB);
        txtHipotenusa.setText(String.valueOf(hipotenusa));
        }//GEN-LAST:event_btnCalcActionPerformed


        // Variables declaration - do not modify//GEN-BEGIN:variables
        private javax.swing.JButton btnCalc;
        private javax.swing.JButton btnDel;
        private javax.swing.JButton btnExit;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel2;
        private javax.swing.JLabel jLabel3;
        private javax.swing.JTextField txtA;
        private javax.swing.JTextField txtB;
        private javax.swing.JTextField txtHipotenusa;
        // End of variables declaration//GEN-END:variables
}
```

Pitagoras.java

```
package Menus;

public class Pitagoras {
public static double calc_hipotenusa(double catetoA, double catetoB){
        double hipotenusa;
        hipotenusa = Math.sqrt(Math.pow(catetoA,2)+ Math.pow(catetoB,2));
        return hipotenusa;
}
}
```

Voltage.java

```
package Menus;
public class Voltage {
public static double calc_voltaje(double current, double resistance){
        double voltage;
        voltage = current*resistance;
        return voltage;
}
}
```

VoltageForm.form

```
<?xml version="1.0" encoding="UTF-8" ?>

<Form version="1.3" maxVersion="1.9"
type="org.netbeans.modules.form.forminfo.JInternalFrameFormInfo">
  <Properties>
        <Property name="title" type="java.lang.String" value="Calcular Voltaje"/>
```

```
  </Properties>
  <SyntheticProperties>
        <SyntheticProperty name="formSizePolicy" type="int" value="1"/>
  </SyntheticProperties>
  <AuxValues>
        <AuxValue name="FormSettings_autoResourcing" type="java.lang.Integer"
value="0"/>
        <AuxValue name="FormSettings_autoSetComponentName"
type="java.lang.Boolean" value="false"/>
        <AuxValue name="FormSettings_generateFQN" type="java.lang.Boolean"
value="true"/>
        <AuxValue name="FormSettings_generateMnemonicsCode"
type="java.lang.Boolean" value="false"/>
        <AuxValue name="FormSettings_i18nAutoMode" type="java.lang.Boolean"
value="false"/>
        <AuxValue name="FormSettings_layoutCodeTarget" type="java.lang.Integer"
value="1"/>
        <AuxValue name="FormSettings_listenerGenerationStyle" type="java.lang.Integer"
value="0"/>
        <AuxValue name="FormSettings_variablesLocal" type="java.lang.Boolean"
value="false"/>
        <AuxValue name="FormSettings_variablesModifier" type="java.lang.Integer"
value="2"/>
  </AuxValues>

  <Layout>
        <DimensionLayout dim="0">
        <Group type="103" groupAlignment="0" attributes="0">
        <Group type="102" attributes="0">
        <Group type="103" groupAlignment="0" attributes="0">
                <Group type="102" alignment="0" attributes="0">
                <EmptySpace min="-2" pref="67" max="-2" attributes="0"/>
                <Group type="103" groupAlignment="0" max="-2" attributes="0">
                <Group type="102" attributes="0">
                        <Component id="jLabel3" min="-2" max="-2" attributes="0"/>
                        <EmptySpace type="separate" max="-2" attributes="0"/>
                        <Component id="txtVoltage" max="32767" attributes="0"/>
                </Group>
                <Group type="102" attributes="0">
                        <Component id="jLabel2" min="-2" max="-2" attributes="0"/>
                        <EmptySpace type="separate" max="-2" attributes="0"/>
                        <Component id="txtResistance" max="32767" attributes="0"/>
                </Group>
                <Group type="102" attributes="0">
                        <Component id="jLabel1" min="-2" max="-2" attributes="0"/>
                        <EmptySpace type="separate" max="-2" attributes="0"/>
                        <Component id="txtCurrent" min="-2" pref="167" max="-2"
attributes="0"/>
```

```
                </Group>
                </Group>
                </Group>
                <Group type="102" alignment="0" attributes="0">
                <EmptySpace min="-2" pref="43" max="-2" attributes="0"/>
                <Component id="btnCalc" min="-2" max="-2" attributes="0"/>
                <EmptySpace min="-2" pref="39" max="-2" attributes="0"/>
                <Component id="btnDel" min="-2" max="-2" attributes="0"/>
                <EmptySpace min="-2" pref="39" max="-2" attributes="0"/>
                <Component id="btnExit" min="-2" max="-2" attributes="0"/>
                </Group>
        </Group>
        <EmptySpace pref="56" max="32767" attributes="0"/>
        </Group>
        </Group>
        </DimensionLayout>
        <DimensionLayout dim="1">
        <Group type="103" groupAlignment="0" attributes="0">
        <Group type="102" alignment="0" attributes="0">
        <EmptySpace min="-2" pref="54" max="-2" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
                <Component id="jLabel1" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="txtCurrent" alignment="3" min="-2" max="-2" attributes="0"/>
        </Group>
        <EmptySpace type="separate" max="-2" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
                <Component id="jLabel2" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="txtResistance" alignment="3" min="-2" max="-2"
attributes="0"/>
        </Group>
        <EmptySpace type="separate" max="-2" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
                <Component id="jLabel3" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="txtVoltage" alignment="3" min="-2" max="-2" attributes="0"/>
        </Group>
        <EmptySpace pref="52" max="32767" attributes="0"/>
        <Group type="103" groupAlignment="3" attributes="0">
                <Component id="btnCalc" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="btnDel" alignment="3" min="-2" max="-2" attributes="0"/>
                <Component id="btnExit" alignment="3" min="-2" max="-2" attributes="0"/>
        </Group>
        <EmptySpace min="-2" pref="43" max="-2" attributes="0"/>
        </Group>
        </Group>
        </DimensionLayout>
  </Layout>
  <SubComponents>
        <Component class="javax.swing.JLabel" name="jLabel1">
```

```
        <Properties>
        <Property name="text" type="java.lang.String" value="Corriente"/>
        </Properties>
        </Component>
        <Component class="javax.swing.JLabel" name="jLabel2">
        <Properties>
        <Property name="text" type="java.lang.String" value="Resistencia"/>
        </Properties>
        </Component>
        <Component class="javax.swing.JLabel" name="jLabel3">
        <Properties>
        <Property name="text" type="java.lang.String" value="Voltaje"/>
        </Properties>
        </Component>
        <Component class="javax.swing.JTextField" name="txtCurrent">
        </Component>
        <Component class="javax.swing.JTextField" name="txtResistance">
        </Component>
        <Component class="javax.swing.JTextField" name="txtVoltage">
        <Events>
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="txtVoltageActionPerformed"/>
        </Events>
        </Component>
        <Component class="javax.swing.JButton" name="btnCalc">
        <Properties>
        <Property name="text" type="java.lang.String" value="Calcular"/>
        </Properties>
        <Events>
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="btnCalcActionPerformed"/>
        </Events>
        </Component>
        <Component class="javax.swing.JButton" name="btnDel">
        <Properties>
        <Property name="text" type="java.lang.String" value="Borrar"/>
        </Properties>
        <Events>
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="btnDelActionPerformed"/>
        </Events>
        </Component>
        <Component class="javax.swing.JButton" name="btnExit">
        <Properties>
        <Property name="text" type="java.lang.String" value="Salir"/>
        </Properties>
        <Events>
```

```
        <EventHandler event="actionPerformed" listener="java.awt.event.ActionListener"
parameters="java.awt.event.ActionEvent" handler="btnExitActionPerformed"/>
        </Events>
        </Component>
  </SubComponents>
</Form>
```

VoltageForm.Java

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

/**
 *
 * @author Camilo
 */
public class VoltageForm extends javax.swing.JInternalFrame {

        /**
        * Creates new form VoltageForm
        */
        public VoltageForm() {
        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">//GEN-BEGIN:initComponents
        private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        txtCurrent = new javax.swing.JTextField();
        txtResistance = new javax.swing.JTextField();
        txtVoltage = new javax.swing.JTextField();
        btnCalc = new javax.swing.JButton();
        btnDel = new javax.swing.JButton();
        btnExit = new javax.swing.JButton();
```

```
        setTitle("Calcular Voltaje");

        jLabel1.setText("Corriente");

        jLabel2.setText("Resistencia");

        jLabel3.setText("Voltaje");

        txtVoltage.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                txtVoltageActionPerformed(evt);
        }
        });

        btnCalc.setText("Calcular");
        btnCalc.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnCalcActionPerformed(evt);
        }
        });

        btnDel.setText("Borrar");
        btnDel.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnDelActionPerformed(evt);
        }
        });

        btnExit.setText("Salir");
        btnExit.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                btnExitActionPerformed(evt);
        }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addGap(67, 67, 67)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addGroup(layout.createSequentialGroup()
```

```
                        .addComponent(jLabel3)
                        .addGap(18, 18, 18)
                        .addComponent(txtVoltage))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel2)
                        .addGap(18, 18, 18)
                        .addComponent(txtResistance))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel1)
                        .addGap(18, 18, 18)
                        .addComponent(txtCurrent,
javax.swing.GroupLayout.PREFERRED_SIZE, 167,
javax.swing.GroupLayout.PREFERRED_SIZE))))
                .addGroup(layout.createSequentialGroup()
                .addGap(43, 43, 43)
                .addComponent(btnCalc)
                .addGap(39, 39, 39)
                .addComponent(btnDel)
                .addGap(39, 39, 39)
                .addComponent(btnExit)))
                .addContainerGap(56, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(54, 54, 54)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(txtCurrent, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(txtResistance,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(txtVoltage, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
52, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
                .addComponent(btnCalc)
                .addComponent(btnDel)
                .addComponent(btnExit))
                .addGap(43, 43, 43))
        );

        pack();
        }// </editor-fold>//GEN-END:initComponents

        private void txtVoltageActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_txtVoltageActionPerformed
        // TODO add your handling code here:
        }//GEN-LAST:event_txtVoltageActionPerformed

        private void btnExitActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnExitActionPerformed
        this.dispose();
        }//GEN-LAST:event_btnExitActionPerformed

        private void btnDelActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnDelActionPerformed
        double current, resistance, voltage;
        current=0;
        resistance=0;
        voltage=0;
        txtCurrent.setText("");
        txtResistance.setText("");
        txtVoltage.setText("");
        }//GEN-LAST:event_btnDelActionPerformed

        private void btnCalcActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_btnCalcActionPerformed
        double current, resistance, voltage;
        current = Double.parseDouble(txtCurrent.getText());
        resistance = Double.parseDouble(txtResistance.getText());
        voltage = Voltage.calc_voltaje(current, resistance);
        txtVoltage.setText(String.valueOf(voltage));
        }//GEN-LAST:event_btnCalcActionPerformed


        // Variables declaration - do not modify//GEN-BEGIN:variables
        private javax.swing.JButton btnCalc;
        private javax.swing.JButton btnDel;
        private javax.swing.JButton btnExit;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel2;
        private javax.swing.JLabel jLabel3;
        private javax.swing.JTextField txtCurrent;
```

```
        private javax.swing.JTextField txtResistance;
        private javax.swing.JTextField txtVoltage;
        // End of variables declaration//GEN-END:variables
}
```

EJERCICIO 2

Notas.java

```
package Ejercicio2;

public class Notas {
        double[] gradelist;
        public Notas(){
        gradelist = new double[5];

        }
        double average(){
        double suma=0;
        for(int i=0;i<gradelist.length;i++){
        suma=suma+gradelist[i];
        }
        return (suma/gradelist.length);
        }
        double dstandard(){
        double avg = average();
        double suma=0;
        for(int i=0;i<gradelist.length;i++){
        suma+=Math.pow(gradelist[i]-avg, 2);
        }
        return Math.sqrt(suma/gradelist.length);
        }
        double least(){
        double least=gradelist[0];
        for(int i=0;i<gradelist.length;i++){
        if(gradelist[i]<least){
                least=gradelist[i];
        }
        }
        return least;
        }
        double most(){
        double most=gradelist[0];
        for(int i=0;i<gradelist.length;i++){
        if(gradelist[i]>most){
                most=gradelist[i];
        }
```

```
        }
        return most;
        }

}
```

NotasEjercicio.Java

```
package Ejercicio2;
import javax.swing.JFrame;
import java.lang.Math;
public class NotasEjercicio {

        public static void main(String[] args) {
        frameejercicio objcreature = new frameejercicio();
        objcreature.setVisible(true);
        }
}
```

frameejercicio.java

```
package Ejercicio2;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;
public class frameejercicio extends javax.swing.JFrame {

        public frameejercicio() {
        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() {

        jLabel4 = new javax.swing.JLabel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        nota1input = new javax.swing.JTextField();
```

```
nota2input = new javax.swing.JTextField();
nota3input = new javax.swing.JTextField();
nota4input = new javax.swing.JTextField();
nota5input = new javax.swing.JTextField();
gobutton = new javax.swing.JButton();
cleanbutton = new javax.swing.JButton();
jLabel7 = new javax.swing.JLabel();
jLabel8 = new javax.swing.JLabel();
jLabel9 = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();
avgtxt = new javax.swing.JLabel();
stdtxt = new javax.swing.JLabel();
leasttxt = new javax.swing.JLabel();
mosttxt = new javax.swing.JLabel();

jLabel4.setText("jLabel4");

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jLabel1.setText("Nota 1:");

jLabel2.setText("Nota 2:");

jLabel3.setText("Nota 3:");

jLabel5.setText("Nota 4:");

jLabel6.setText("Nota 5:");

gobutton.setText("Calcular");
gobutton.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        gobuttonActionPerformed(evt);
}
});

cleanbutton.setText("Limpiar");
cleanbutton.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        cleanbuttonActionPerformed(evt);
}
});

jLabel7.setText("Promedio:");

jLabel8.setText("Desviación Estándar:");

jLabel9.setText("Valor Menor:");
```

```
        jLabel10.setText("Valor Mayor:");

        avgtxt.setText("-");

        stdtxt.setText("-");

        leasttxt.setText("-");

        mosttxt.setText("-");

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addGap(14, 14, 14)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addComponent(jLabel6)
                        .addComponent(jLabel5)
                        .addComponent(jLabel3)
                        .addComponent(jLabel2)
                        .addComponent(jLabel1))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addComponent(nota1input)
                        .addComponent(nota2input)
                        .addComponent(nota3input)
                        .addComponent(nota4input)
                        .addComponent(nota5input,
javax.swing.GroupLayout.DEFAULT_SIZE, 130, Short.MAX_VALUE)))
                .addGroup(layout.createSequentialGroup()
                .addGap(24, 24, 24)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel7)
                        .addGap(18, 18, 18)
                        .addComponent(avgtxt))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(gobutton)
                        .addGap(18, 18, 18)
                        .addComponent(cleanbutton))
```

```
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel8)
                        .addGap(18, 18, 18)
                        .addComponent(stdtxt))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel9)
                        .addGap(18, 18, 18)
                        .addComponent(leasttxt))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel10)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                        .addComponent(mosttxt)))))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(nota1input, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(nota2input, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(nota3input, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel5)
                .addComponent(nota4input, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel6)
```

```
                .addComponent(nota5input, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(gobutton)
                .addComponent(cleanbutton))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel7)
                .addComponent(avgtxt))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel8)
                .addComponent(stdtxt))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel9)
                .addComponent(leasttxt))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel10)
                .addComponent(mosttxt))
                .addContainerGap(38, Short.MAX_VALUE))
        );

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

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

        boolean error=false;
        try{
        Notas notas=new Notas();
        notas.gradelist[0]=Double.parseDouble(nota1input.getText());
        notas.gradelist[1]=Double.parseDouble(nota2input.getText());
        notas.gradelist[2]=Double.parseDouble(nota3input.getText());
        notas.gradelist[3]=Double.parseDouble(nota4input.getText());
        notas.gradelist[4]=Double.parseDouble(nota5input.getText());
        avgtxt.setText(String.valueOf(String.format("%.2f",notas.average())));
        stdtxt.setText(String.valueOf(String.format("%.2f",notas.dstandard())));
        leasttxt.setText(String.valueOf(String.format("%.2f",notas.least())));
        mosttxt.setText(String.valueOf(String.format("%.2f",notas.most())));
```

```
        }
        catch(NumberFormatException e){
        error=true;
        } finally {
        if(error){
        JOptionPane.showMessageDialog(rootPane, "Campo vacío o formato de numero
incorrecto", "Error", JOptionPane.ERROR_MESSAGE);

        }
        }
        }

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

        nota1input.setText("");
        nota2input.setText("");
        nota3input.setText("");
        nota4input.setText("");
        nota5input.setText("");
        avgtxt.setText("-");
        stdtxt.setText("-");
        leasttxt.setText("-");
        mosttxt.setText("-");
        }

        /**
        * @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(frameejercicio.class.getName()).log(java.util.logging.Level
.SEVERE, null, ex);
```

```
        } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(frameejercicio.class.getName()).log(java.util.logging.Level
.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(frameejercicio.class.getName()).log(java.util.logging.Level
.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
java.util.logging.Logger.getLogger(frameejercicio.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 frameejercicio().setVisible(true);
        }
        });
        }

        // Variables declaration - do not modify
        private javax.swing.JLabel avgtxt;
        private javax.swing.JButton cleanbutton;
        private javax.swing.JButton gobutton;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel10;
        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.JLabel jLabel9;
        private javax.swing.JLabel leasttxt;
        private javax.swing.JLabel mosttxt;
        private javax.swing.JTextField nota1input;
        private javax.swing.JTextField nota2input;
        private javax.swing.JTextField nota3input;
        private javax.swing.JTextField nota4input;
        private javax.swing.JTextField nota5input;
        private javax.swing.JLabel stdtxt;
        // End of variables declaration
}
```

EJERCICIO 3

FigurasEjercicio.java

```
package Ejercicio3;
import javax.swing.JFrame;
import java.lang.Math;
import java.awt.event.*;
public class FigurasEjercicio {

	public static void main(String[] args) {
	framefig objcreature = new framefig();
	objcreature.setVisible(true);
	}
}
```

ball.java

```
package Ejercicio3;
import java.lang.Math;
public class ball extends geomfig {
	private double radio;
	public double calcVol(){
	double vol=1.333*Math.PI*Math.pow(this.radio, 3);
	return vol;
	}
	public double calcSurf(){
	double surf=4*Math.PI*Math.pow(this.radio, 2);
	return surf;
	}
	public ball(double radio){
	this.radio=radio;
	this.setVolume(calcVol());
	this.setSurface(calcSurf());
	}

}
```

ballframe.java

```
/*
 * 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 Ejercicio3;
```

```
import javax.swing.JOptionPane;

/**
 *
 * @author Cinderr
 */
public class ballframe extends javax.swing.JFrame {

        /**
        * Creates new form ballframe
        */
        public ballframe() {
        initComponents();
        setLocationRelativeTo(null);
        }

        /**
        * 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() {

        jLabel1 = new javax.swing.JLabel();
        radinput = new javax.swing.JTextField();
        goballbttn = new javax.swing.JButton();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        voltxt = new javax.swing.JLabel();
        surftxt = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setText("Radio (cm):");

        goballbttn.setText("Calcular");
        goballbttn.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                goballbttnActionPerformed(evt);
        }
        });

        jLabel2.setText("Volumen(cm3):");
```

```
        jLabel3.setText("Superficie(cm2):");

        voltxt.setText("-");

        surftxt.setText("-");

        jLabel6.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Ejercicio3/ball.png"))); // NOI18N

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel1)
                .addComponent(jLabel3, javax.swing.GroupLayout.Alignment.TRAILING))
                .addComponent(jLabel2))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(goballbttn, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(surftxt)
                        .addComponent(voltxt)
                        .addComponent(radinput,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(0, 0, Short.MAX_VALUE)))
                .addGap(26, 26, 26)
                .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 369,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(22, 22, 22)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
                .addComponent(jLabel1)
                .addComponent(radinput, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addComponent(goballbttn)
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(voltxt))
                .addGap(23, 23, 23)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(surftxt)))
        .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 261,
javax.swing.GroupLayout.PREFERRED_SIZE)
        );

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

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

        boolean error=false;
        try{
        double rad=Double.parseDouble(radinput.getText());
        ball ball=new ball(rad);
        voltxt.setText(String.format("%.2f",ball.calcVol()));
        surftxt.setText(String.format("%.2f", ball.calcSurf()));
        } catch(NumberFormatException e){
        error=true;
        } finally {
        if(error){
        JOptionPane.showMessageDialog(rootPane, "Campo vacío o formato de numero
incorrecto", "Error", JOptionPane.ERROR_MESSAGE);
        }
        }
        }

        /**
        * @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(ballframe.class.getName()).log(java.util.logging.Level.SE
VERE, null, ex);
        } catch (InstantiationException ex) {

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

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

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

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

        // Variables declaration - do not modify
        private javax.swing.JButton goballbttn;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel2;
        private javax.swing.JLabel jLabel3;
        private javax.swing.JLabel jLabel6;
        private javax.swing.JTextField radinput;
        private javax.swing.JLabel surftxt;
        private javax.swing.JLabel voltxt;
        // End of variables declaration
```

```
}
```

cilindro.java

```
package Ejercicio3;
import java.lang.Math;
public class cilindro extends geomfig {
        private double radio;
        private double height;
        public double calcVol(){
        double vol=Math.PI*height*Math.pow(radio,2.0);
        return vol;
        }
        public double calcSurf(){
        double areaA=2*Math.PI*radio*height;
        double areaB=2*Math.PI*Math.pow(radio,2);
        return areaA+areaB;
        }
        public cilindro(double radio, double height){
        this.radio=radio;
        this.height=height;
        this.setVolume(calcVol());
        this.setSurface(calcSurf());
        }

}
```

cilindroframe.java

```
/*
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this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this
template
 */
package Ejercicio3;

import javax.swing.JOptionPane;

/**
 *
 * @author Cinderr
 */
public class cilindroframe extends javax.swing.JFrame {

        /**
        * Creates new form cilindroframe
```

```
*/
public cilindroframe() {
initComponents();
setLocationRelativeTo(null);
}

/**
* 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() {

surftxt = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
gocilindrobttn = new javax.swing.JButton();
radioinput = new javax.swing.JTextField();
jLabel1 = new javax.swing.JLabel();
voltxt = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
heightinput = new javax.swing.JTextField();
jLabel5 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

surftxt.setText("-");

jLabel3.setText("Superficie(cm2):");

jLabel2.setText("Volumen(cm3):");

gocilindrobttn.setText("Calcular");
gocilindrobttn.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        gocilindrobttnActionPerformed(evt);
}
});

jLabel1.setText("Radio (cm):");

voltxt.setText("-");

jLabel4.setText("Altura (cm):");
```

```
        jLabel5.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Ejercicio3/cilinder.png"))); // NOI18N

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel1)
                .addGap(42, 42, 42)
                .addComponent(radioinput, javax.swing.GroupLayout.PREFERRED_SIZE,
135, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel4)
                .addGap(42, 42, 42)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(gocilindrobttn,
javax.swing.GroupLayout.PREFERRED_SIZE, 139,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(heightinput,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
layout.createSequentialGroup()
                        .addComponent(jLabel3)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(surftxt))
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
layout.createSequentialGroup()
                        .addComponent(jLabel2)
                        .addGap(18, 18, 18)
                        .addComponent(voltxt))))
                .addGap(18, 18, 18)
                .addComponent(jLabel5)
                .addGap(0, 10, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGroup(layout.createSequentialGroup()
                .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel1)
                        .addComponent(radioinput,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel4)
                        .addComponent(heightinput,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addComponent(gocilindrobttn)
                .addGap(30, 30, 30)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel2)
                        .addComponent(voltxt)))
                .addComponent(jLabel5))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(surftxt))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );

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

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

        boolean error=false;
        try{
        double radio=Double.parseDouble(radioinput.getText());
        double height=Double.parseDouble(heightinput.getText());
        cilindro cil=new cilindro(radio, height);
        voltxt.setText(String.format("%.2f",cil.calcVol()));
        surftxt.setText(String.format("%.2f", cil.calcSurf()));
        } catch(NumberFormatException e){
```

```
        error=true;
        } finally {
        if(error){
                JOptionPane.showMessageDialog(rootPane, "Campo vacío o formato de
numero incorrecto", "Error", JOptionPane.ERROR_MESSAGE);
        }
        }
        }

        /**
        * @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(cilindroframe.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
        } catch (InstantiationException ex) {

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

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

java.util.logging.Logger.getLogger(cilindroframe.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 cilindroframe().setVisible(true);
        }
        });
        }

        // Variables declaration - do not modify
        private javax.swing.JButton gocilindrobttn;
        private javax.swing.JTextField heightinput;
        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.JTextField radioinput;
        private javax.swing.JLabel surftxt;
        private javax.swing.JLabel voltxt;
        // End of variables declaration
}
```

cube.java

```
package Ejercicio3;
import java.lang.Math;
public class cube extends geomfig{
        double arista;
        public double calcVol(){
        double vol=Math.pow(arista, 3);
        return vol;
        }
        public double calcSurf(){
        double surf=6*Math.pow(arista, 2);
        return surf;
        }
        public cube(double arista){
        this.arista=arista;
        this.setVolume(calcVol());
        this.setSurface(calcSurf());
        }
}
```

cubeframe.java

```
/*
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this license
```

```
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this
template
 */
package Ejercicio3;

import javax.swing.JOptionPane;

/**
 *
 * @author Cinderr
 */
public class cubeframe extends javax.swing.JFrame {

        /**
        * Creates new form cubeframe
        */
        public cubeframe() {
        initComponents();
        setLocationRelativeTo(null);
        }

        /**
        * 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() {

        jLabel1 = new javax.swing.JLabel();
        aristainput = new javax.swing.JTextField();
        gocubebttn = new javax.swing.JButton();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        voltxt = new javax.swing.JLabel();
        surftxt = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel1.setText("Arista (cm):");

        gocubebttn.setText("Calcular");
        gocubebttn.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                gocubebttnActionPerformed(evt);
        }
```

```
        });

        jLabel2.setText("Volumen(cm3):");

        jLabel3.setText("Superficie(cm2):");

        voltxt.setText("-");

        surftxt.setText("-");

        jLabel4.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Ejercicio3/cube.png"))); // NOI18N

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel1)
                        .addGap(24, 24, 24))
                        .addComponent(jLabel2))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
                        .addComponent(gocubebttn,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(aristainput,
javax.swing.GroupLayout.DEFAULT_SIZE, 135, Short.MAX_VALUE))
                        .addComponent(voltxt)))
                .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel3)
                .addGap(18, 18, 18)
                .addComponent(surftxt)))
                .addGap(18, 18, 18)
                .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 261,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(aristainput, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addComponent(gocubebttn)
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(voltxt))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(surftxt))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 229,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(0, 0, Short.MAX_VALUE))
        );

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

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

        boolean error=false;
        try{
        double arista=Double.parseDouble(aristainput.getText());
        cube cube=new cube(arista);
        voltxt.setText(String.format("%.2f",cube.calcVol()));
        surftxt.setText(String.format("%.2f", cube.calcSurf()));
        } catch(NumberFormatException e){
        error=true;
        } finally {
        if(error){
                JOptionPane.showMessageDialog(rootPane, "Campo vacío o formato de
numero incorrecto", "Error", JOptionPane.ERROR_MESSAGE);
        }
```

```
        }
        }

        /**
        * @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(cubeframe.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);
        } catch (InstantiationException ex) {

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

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

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

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

```
        // Variables declaration - do not modify
        private javax.swing.JTextField aristainput;
        private javax.swing.JButton gocubebttn;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JLabel jLabel2;
        private javax.swing.JLabel jLabel3;
        private javax.swing.JLabel jLabel4;
        private javax.swing.JLabel surftxt;
        private javax.swing.JLabel voltxt;
        // End of variables declaration
}
```

framefig.java

```
/*
 * 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 Ejercicio3;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;
public class framefig extends javax.swing.JFrame {

        /**
        * Creates new form framefig
        */
        public framefig() {
        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() {

        cilinderbutton = new javax.swing.JButton();
        ballbutton = new javax.swing.JButton();
        cubebutton = new javax.swing.JButton();
        trianglebutton = new javax.swing.JButton();
```

```
obamabutton = new javax.swing.JButton();
jLabel1 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

cilinderbutton.setText("Cilindro");
cilinderbutton.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        cilinderbuttonActionPerformed(evt);
}
});

ballbutton.setText("Esfera");
ballbutton.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        ballbuttonActionPerformed(evt);
}
});

cubebutton.setText("Cubo");
cubebutton.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        cubebuttonActionPerformed(evt);
}
});

trianglebutton.setText("Piramide");
trianglebutton.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        trianglebuttonActionPerformed(evt);
}
});

obamabutton.setText("Prisma Triangular");
obamabutton.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        obamabuttonActionPerformed(evt);
}
});

jLabel1.setText("Seleccione una figura geométrica:");

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

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                .addGap(16, 16, 16)
                .addComponent(cilinderbutton)
                .addGap(18, 18, 18)
                .addComponent(ballbutton)
                .addGap(18, 18, 18)
                .addComponent(cubebutton)
                .addGap(18, 18, 18)
                .addComponent(trianglebutton)
                .addGap(18, 18, 18)
                .addComponent(obamabutton))
                .addGroup(layout.createSequentialGroup()
                .addGap(150, 150, 150)
                .addComponent(jLabel1)))
                .addContainerGap(16, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addGap(11, 11, 11)
                .addComponent(jLabel1)
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(cilinderbutton)
                .addComponent(ballbutton)
                .addComponent(cubebutton)
                .addComponent(trianglebutton)
                .addComponent(obamabutton))
                .addContainerGap(31, Short.MAX_VALUE))
        );

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

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

        cilindroframe h=new cilindroframe();
        h.setVisible(true);
        h.setLocationRelativeTo(null);
        }

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

        ballframe h=new ballframe();
        h.setVisible(true);
```

```
        h.setLocationRelativeTo(null);
        }

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

        cubeframe h=new cubeframe();
        h.setVisible(true);
        h.setLocationRelativeTo(null);
        }

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

        triangleframe h=new triangleframe();
        h.setVisible(true);
        h.setLocationRelativeTo(null);
        }

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

        obamiumframe h=new obamiumframe();
        h.setVisible(true);
        h.setLocationRelativeTo(null);
        }

        /**
        * @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(framefig.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (InstantiationException ex) {
```

```
java.util.logging.Logger.getLogger(framefig.class.getName()).log(java.util.logging.Level.SEV
ERE, null, ex);
        } catch (IllegalAccessException ex) {

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

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

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

        // Variables declaration - do not modify
        private javax.swing.JButton ballbutton;
        private javax.swing.JButton cilinderbutton;
        private javax.swing.JButton cubebutton;
        private javax.swing.JLabel jLabel1;
        private javax.swing.JButton obamabutton;
        private javax.swing.JButton trianglebutton;
        // End of variables declaration
}
```

geomfig.java

```
package Ejercicio3;
import java.lang.Math;
public class geomfig {
        private double volume;
        private double surface;
        public void setVolume(double volume){
        this.volume=volume;
        }
        public void setSurface(double surface){
        this.surface=surface;
        }
        public double getVolume(){
        return this.volume;
```

```
        }
        public double getSurface(){
        return this.surface;
        }
}
```

obamium.java

```
package Ejercicio3;
import java.lang.Math;
public class obamium extends geomfig{
        private double height;
        private double width;
        private double basetri;
        private double triangle2;
        private double triangle3;
        public double calcVol(){
        double vol=(basetri*height*width)/2;
        return vol;
        }
        public double calcSurf(){
        double surf=basetri*height+basetri*width+triangle2*width+triangle3*width;
        return surf;
        }
        public obamium(double height, double width, double basetri, double triangle2, double
triangle3){
        this.height=height;
        this.width=width;
        this.basetri=basetri;
        this.triangle2=triangle2;
        this.triangle3=triangle3;
        this.setVolume(calcVol());
        this.setSurface(calcSurf());
        }
}
```

obamiumframe.java

```
/*
 * 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 Ejercicio3;

import javax.swing.JOptionPane;
```

```
/**
 *
 * @author Cinderr
 */
public class obamiumframe extends javax.swing.JFrame {

        /**
        * Creates new form obamiumframe
        */
        public obamiumframe() {
        initComponents();
        setLocationRelativeTo(null);
        }

        /**
        * 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() {

        jLabel3 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        voltxt = new javax.swing.JLabel();
        gotrianglebttn = new javax.swing.JButton();
        widthinput = new javax.swing.JTextField();
        jLabel5 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        heightinput = new javax.swing.JTextField();
        basetriinput = new javax.swing.JTextField();
        jLabel1 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        triangle2input1 = new javax.swing.JTextField();
        jLabel7 = new javax.swing.JLabel();
        triangle3input2 = new javax.swing.JTextField();
        jLabel8 = new javax.swing.JLabel();
        surftxt = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jLabel3.setText("Superficie(cm2):");

        jLabel2.setText("Volumen(cm3):");

        voltxt.setText("-");
```

```
        gotrianglebttn.setText("Calcular");
        gotrianglebttn.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
                gotrianglebttnActionPerformed(evt);
        }
        });

        jLabel5.setText("Profundidad/Ancho (cm):");

        jLabel4.setText("Altura (cm):");

        jLabel1.setText("Base Triangulo (cm):");

        jLabel6.setText("Lado Triangulo (cm):");

        jLabel7.setText("Lado Triangulo (cm):");

        jLabel8.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Ejercicio3/obamium.png"))); // NOI18N

        surftxt.setText("-");

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel2)
                        .addGap(18, 18, 18)
                        .addComponent(voltxt))
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel3)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                        .addComponent(surftxt))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```
                        .addComponent(gotrianglebttn,
javax.swing.GroupLayout.PREFERRED_SIZE, 139,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel5)
                        .addGap(24, 24, 24)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                .addComponent(heightinput,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(widthinput,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE)))))
                .addGap(6, 6, 6))
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel4)
                        .addComponent(jLabel1))
                .addGap(52, 52, 52)
                .addComponent(basetriinput, javax.swing.GroupLayout.PREFERRED_SIZE,
135, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
layout.createSequentialGroup()
                        .addComponent(jLabel6)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(triangle2input1,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
layout.createSequentialGroup()
                        .addComponent(jLabel7)
                        .addGap(50, 50, 50)
                        .addComponent(triangle3input2,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE))))
                .addComponent(jLabel8)
                .addContainerGap())
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
```

```
                .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel8)
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel1)
                        .addComponent(basetriinput,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel6)
                        .addComponent(triangle2input1,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel7)
                        .addComponent(triangle3input2,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(12, 12, 12)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel4)
                        .addComponent(heightinput,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel5)
                        .addComponent(widthinput,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addComponent(gotrianglebttn)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel2)
                        .addComponent(voltxt))
                .addGap(18, 18, 18)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel3)
                        .addComponent(surftxt))))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );

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

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

        boolean error=false;
        try{
        double basetri=Double.parseDouble(basetriinput.getText());
        double height=Double.parseDouble(heightinput.getText());
        double width=Double.parseDouble(widthinput.getText());
        double triangle2=Double.parseDouble(triangle2input1.getText());
        double triangle3=Double.parseDouble(triangle3input2.getText());
        obamium horrid=new obamium(height, width, basetri, triangle2, triangle3);
        voltxt.setText(String.format("%.2f",horrid.calcVol()));
        surftxt.setText(String.format("%.2f", horrid.calcSurf()));
        } catch(NumberFormatException e){
        error=true;
        } finally {
        if(error){
                JOptionPane.showMessageDialog(rootPane, "Campo vacío o formato de
numero incorrecto", "Error", JOptionPane.ERROR_MESSAGE);
        }
        }
        }

        /**
        * @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(obamiumframe.class.getName()).log(java.util.logging.Lev
el.SEVERE, null, ex);
        } catch (InstantiationException ex) {

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

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

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

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

        // Variables declaration - do not modify
        private javax.swing.JTextField basetriinput;
        private javax.swing.JButton gotrianglebttn;
        private javax.swing.JTextField heightinput;
        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.JLabel surftxt;
        private javax.swing.JTextField triangle2input1;
        private javax.swing.JTextField triangle3input2;
        private javax.swing.JLabel voltxt;
        private javax.swing.JTextField widthinput;
```

```
        // End of variables declaration
}
```

triangle.java

```
package Ejercicio3;
import java.lang.Math;
public class triangle extends geomfig{
        private double base;
        private double height;
        private double apotema;
        public double calcVol(){
        double vol= (Math.pow(base, 2)*height)/3;
        return vol;
        }
        public double calcSurf(){
        double areaBase=Math.pow(base, 2);
        double areaLado=2*base*apotema;
        return areaBase+areaLado;
        }
        public triangle(double base, double height, double apotema){
        this.base=base;
        this.height=height;
        this.apotema=apotema;
        this.setVolume(calcVol());
        this.setSurface(calcSurf());
        }

}
```

triangleframe.java

```
/*
 * 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 Ejercicio3;

import javax.swing.JOptionPane;

/**
 *
 * @author Cinderr
 */
public class triangleframe extends javax.swing.JFrame {
```

```
/**
* Creates new form triangleframe
*/
public triangleframe() {
initComponents();
setLocationRelativeTo(null);
}

/**
* 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() {

jLabel3 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
voltxt = new javax.swing.JLabel();
gotrianglebttn = new javax.swing.JButton();
heightinput = new javax.swing.JTextField();
baseinput = new javax.swing.JTextField();
jLabel1 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
apotemainput = new javax.swing.JTextField();
jLabel6 = new javax.swing.JLabel();
surftxt = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jLabel3.setText("Superficie(cm2):");

jLabel2.setText("Volumen(cm3):");

voltxt.setText("-");

gotrianglebttn.setText("Calcular");
gotrianglebttn.addActionListener(new java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) {
        gotrianglebttnActionPerformed(evt);
}
});

jLabel1.setText("Base (cm):");
```

```
        jLabel4.setText("Altura (cm):");

        jLabel5.setText("Apotema (cm):");

        jLabel6.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Ejercicio3/pyramid.png"))); // NOI18N

        surftxt.setText("-");

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

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel4)
                        .addComponent(jLabel1)
                        .addComponent(jLabel5))
                .addGap(24, 24, 24)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(apotemainput,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(baseinput,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(gotrianglebttn,
javax.swing.GroupLayout.PREFERRED_SIZE, 139,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(heightinput,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel2)
                        .addComponent(jLabel3))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(surftxt)
                        .addComponent(voltxt))))
```

```
                .addGap(18, 18, 18)
                .addComponent(jLabel6)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
                .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1)
                .addComponent(baseinput, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel4)
                .addComponent(heightinput, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel5)
                .addComponent(apotemainput,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addComponent(gotrianglebttn)
                .addGap(2, 2, 2)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(voltxt))
                .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(surftxt))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel6)
                .addGap(0, 0, Short.MAX_VALUE))
        );

        pack();
        }// </editor-fold>
```

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

        boolean error=false;
        try{
        double base=Double.parseDouble(baseinput.getText());
        double height=Double.parseDouble(heightinput.getText());
        double apotema=Double.parseDouble(apotemainput.getText());
        triangle tri=new triangle(base, height, apotema);
        voltxt.setText(String.format("%.2f",tri.calcVol()));
        surftxt.setText(String.format("%.2f", tri.calcSurf()));
        } catch(NumberFormatException e){
        error=true;
        } finally {
        if(error){
                JOptionPane.showMessageDialog(rootPane, "Campo vacío o formato de
numero incorrecto", "Error", JOptionPane.ERROR_MESSAGE);
        }
        }
        }

        /**
        * @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(triangleframe.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(triangleframe.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
```

```
        } catch (IllegalAccessException ex) {

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

java.util.logging.Logger.getLogger(triangleframe.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 triangleframe().setVisible(true);
        }
        });
        }

        // Variables declaration - do not modify
        private javax.swing.JTextField apotemainput;
        private javax.swing.JTextField baseinput;
        private javax.swing.JButton gotrianglebttn;
        private javax.swing.JTextField heightinput;
        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 surftxt;
        private javax.swing.JLabel voltxt;
        // End of variables declaration
}
```