

```
import java.awt.Graphics;

import java.awt.Image;

import javax.swing.ImageIcon;

import javax.swing.JPanel;


public class calculadora extends javax.swing.JFrame {

    fondo Fimage = new fondo();

    public float num1;

    public float num2;

    public String signos;


    public calculadora() {

        this.setContentPane(Fimage);

        initComponents();

        this.setLocationRelativeTo(null);

        this.setTitle("Calculadora");

    }


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

        Mostrar = new javax.swing.JTextField();
        divicion = new javax.swing.JButton();
        borrar = new javax.swing.JButton();
        multiplicacion = new javax.swing.JButton();
        resta = new javax.swing.JButton();
        ocho = new javax.swing.JButton();
        siete = new javax.swing.JButton();
        nueve = new javax.swing.JButton();
        suma = new javax.swing.JButton();
        sinco = new javax.swing.JButton();
        cuatro = new javax.swing.JButton();
        seis = new javax.swing.JButton();
        dos = new javax.swing.JButton();
        uno = new javax.swing.JButton();
        tres = new javax.swing.JButton();
        igual = new javax.swing.JButton();
        cero = new javax.swing.JButton();
        decimal = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setBackground(new java.awt.Color(255, 255, 153));

        Mostrar.setEditable(false);
        Mostrar.setHorizontalAlignment(javax.swing.JTextField.RIGHT);

        divicion.setText("/");
        divicion.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                divicionActionPerformed(evt);
            }
        });

        borrar.setText("C");
        borrar.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                borrarActionPerformed(evt);
            }
        });

        multiplicacion.setText("X");
```

```

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

resta.setText("-");

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

ocho.setText("8");

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

siete.setText("7");

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

nueve.setText("9");

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

suma.setText("+");

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

sinco.setText("5");

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

cuatro.setText("4");

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

seis.setText("6");

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

dos.setText("2");

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

```

```
    }  
});  
  
uno.setText("1");  
uno.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        unoActionPerformed(evt);  
    }  
});  
  
tres.setText("3");  
tres.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        tresActionPerformed(evt);  
    }  
});  
  
igual.setText("=");  
igual.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        igualActionPerformed(evt);  
    }  
});  
  
cero.setText("0");  
cero.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        ceroActionPerformed(evt);  
    }  
});  
  
decimal.setText(".");  
decimal.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        decimalActionPerformed(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()  
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)  
                        .addComponent(borrar, javax.swing.GroupLayout.PREFERRED_SIZE, 42,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
                        .addComponent(divicion, javax.swing.GroupLayout.PREFERRED_SIZE, 42,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
                        .addComponent(multiplicacion, javax.swing.GroupLayout.PREFERRED_SIZE, 42,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
                        .addComponent(resta, javax.swing.GroupLayout.PREFERRED_SIZE, 42,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
                    .addGroup(layout.createSequentialGroup()  
                        .addGap(14, 14, 14)  
                        .addComponent(siete, javax.swing.GroupLayout.PREFERRED_SIZE, 42,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
                        .addComponent(ocho, javax.swing.GroupLayout.PREFERRED_SIZE, 42,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
                        .addGap(10, 10, 10)
```

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```
.addComponent(nueve, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

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

    .addComponent(suma, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addGroup(layout.createSequentialGroup())

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

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

        .addGroup(layout.createSequentialGroup())

            .addComponent(uno, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

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

            .addComponent(dos, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(10, 10, 10)

            .addComponent(tres, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGroup(layout.createSequentialGroup())

            .addComponent(cuatro, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

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

            .addComponent(sinco, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(10, 10, 10)

            .addComponent(seis, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)))

    .addGroup(layout.createSequentialGroup())

        .addComponent(cero, javax.swing.GroupLayout.PREFERRED_SIZE, 94,
javax.swing.GroupLayout.PREFERRED_SIZE)

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

        .addComponent(decimal, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)))

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

    .addComponent(igual, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addGap(0, 0, Short.MAX_VALUE))

.addGroup(layout.createSequentialGroup())

    .addContainerGap()

    .addComponent(Mostrar)))

.addContainerGap())

);

layout.setVerticalGroup(

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

    .addGroup(layout.createSequentialGroup()

        .addContainerGap()

        .addComponent(Mostrar, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(18, 18, 18)

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

            .addComponent(divicion, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(borrar, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(multiplicacion, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(resta, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE))

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

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

            .addGroup(layout.createSequentialGroup()

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

                    .addComponent(ocho, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addComponent(siete, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addComponent(nueve, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE))

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

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

                    .addComponent(sinco, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addComponent(cuatro, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
        .addComponent(seis, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)))

        .addComponent(suma, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

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

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

        .addGroup(layout.createSequentialGroup())

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

        .addComponent(dos, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(uno, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(tres, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE))

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

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

        .addComponent(cero, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(decimal, javax.swing.GroupLayout.PREFERRED_SIZE, 42,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(0, 0, Short.MAX_VALUE))

        .addComponent(igual, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        .addContainerGap())

    );

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

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

    this.Mostrar.setText(this.Mostrar.getText()+"0");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"1");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"2");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"3");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"4");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"5");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"6");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"7");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"8");

}
```

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

    this.Mostrar.setText(this.Mostrar.getText()+"9");

}
```

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

    String pantalla= Mostrar.getText();

    if(pantalla.length()>0){

        pantalla=pantalla.substring(0,pantalla.length()-1);

        Mostrar.setText(pantalla);

    }

}

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

    this.num1=Float.parseFloat(this.Mostrar.getText());

    this.signos="+";

    this.Mostrar.setText("");

}

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

    this.num2=Float.parseFloat(this.Mostrar.getText());

    switch(this.signos){

        case "+": this.Mostrar.setText(Float.toString(this.num1+this.num2));break;

        case "-": this.Mostrar.setText(Float.toString(this.num1-this.num2));break;

        case "X": this.Mostrar.setText(Float.toString(this.num1*this.num2));break;

        case "/": this.Mostrar.setText(Float.toString(this.num1/this.num2));break;

    }

}

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

    this.num1=Float.parseFloat(this.Mostrar.getText());

    this.signos="-";

    this.Mostrar.setText("");

}

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

    this.num1=Float.parseFloat(this.Mostrar.getText());

    this.signos="X";

    this.Mostrar.setText("");

}

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

    this.num1=Float.parseFloat(this.Mostrar.getText());

    this.signos="/";

    this.Mostrar.setText("");

}

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

    if(!(this.Mostrar.getText().contains("."))){

        this.Mostrar.setText(this.Mostrar.getText()+".");

    }

}

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

    java.awt.EventQueue.invokeLater(new Runnable() {

        public void run() {

            new calculadora().setVisible(true);

        }

    });

}

// Variables declaration - do not modify

private javax.swing.JTextField Mostrar;

private javax.swing.JButton borrar;

private javax.swing.JButton cero;

private javax.swing.JButton cuatro;
```

```
private javax.swing.JButton decimal;

private javax.swing.JButton divicion;

private javax.swing.JButton dos;

private javax.swing.JButton igual;

private javax.swing.JButton multiplicacion;

private javax.swing.JButton nueve;

private javax.swing.JButton ocho;

private javax.swing.JButton resta;

private javax.swing.JButton seis;

private javax.swing.JButton siete;

private javax.swing.JButton sinco;

private javax.swing.JButton suma;

private javax.swing.JButton tres;

private javax.swing.JButton uno;

// End of variables declaration
```

```
class fondo extends JPanel{

    private Image grafic;

    @Override

    public void paint(Graphics g){

        grafic = new ImageIcon(getClass().getResource("/imagenes/imagen.jpg")).getImage();

        g.drawImage(grafic, 0, 0, getWidth(), getHeight(), this);

        setOpaque(false);

        super.paint(g);

    }

}
```

