## CALCULATOR

Java "awt" and "swing"

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# Description of the calculator

A calculator is a device that performs arithmetic operations on numbers. The simplest calculators can do only addition, subtraction, multiplication, and division.

Button of the Calculator.

MC: Button: Memory Clear

M+: Memory Add

M-:Memory Clear.

MR: Memory Recall.



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### Java awt calculator.





#### Code of java awt calculator.

```
import java.awt.*;// Import
                                        //Code for create the Frame
                                        Calculater() { //call the
java Awt all classes
import java.awt.event.*;//
                                      constractor.
Import all awt.event...
                                          setTitle("My
                                      Calculator");//give name for
class Calculater extends Frame
                                      the calculater Form.
implements ActionListener {
  //Create button variables
  Button comminas:
                                          setSize(300, 440); // Make
  Button comdivide:
                                      the size of the Frame
  Button comequal;
  Button comclear;
  Button complas;
                                      setBackground(Color.blue);
                                          :// Add colour to the
  Button commulti:
  Button commc:
                                      background of the Frame...
  Button comMplas;
  Button comMminas;
                                          setVisible(true);//Code for
                                      display the form which we
  Button mula;
                                      created above.
  Button exiter:
  Button memo;
  Button dasama;
                                          Panel p1 = new Panel();//
  Button num1, num2, num3,
                                      make a new panel
num4, num5, num6, num7,
            num9, num0;
                                          add(p1,
num8,
                                      BorderLayout.NORTH);//add
  Button num00:
  //make a text object...
                                      panel to the Form in north
  TextField t = new
                                      side
TextField("", 35);
  String st; //Variable for add
                                          p1.add(t); //add our text
                                      feild to the panel
a numer
  String st1 = "";//variable
                                          //Make Buttons object
which display in text feilds.
  double make1, make2,
                                          commc = new
                                      Button("MC");// Memory
answer;
  String operation, no1, no2,
                                      Clear
totel, madd;
```

```
comMplas = new
                                         exiter = new
Button("M+");//Memory add
                                    Button("Help");// add help
                                    button to the panel....
    comMminas = new
Button("M-");//Memory
                                         mula = new Button("V");
                                        //Create a panel
remove
                                         Panel p = new Panel();
                                        //Place the panel on
    memo = new
Button("MR");//Memory
                                    Frame.
Recall
                                         add(p.
                                    BorderLayout.CENTER);
    comclear = new
                                         //Add buttons to the
Button("CE");// clear every
                                    Panel.
                                         p.add(commc);
thing.
                                         p.add(comMplas);
    comdivide = new
                                         p.add(comMminas);
                                         p.add(memo);
Button("/");
                                         p.add(comclear);
    commulti = new
Button("*");
                                         p.add(mula);
    num7 = new Button("7");
                                         p.add(comdivide);
    num8 = new Button("8");
                                         p.add(commulti);
    num9 = new Button("9");
                                         p.add(num7);
    comminas = new
                                         p.add(num8);
Button("-");
                                         p.add(num9);
    num4 = new Button("4"):
                                         p.add(comminas);
    num5 = new Button("5");
                                         p.add(num4);
                                         p.add(num5);
    num6 = new Button("6");
                                         p.add(num6);
    complas = new
Button("+");
                                         p.add(complas);
    num1 = new Button("1");
                                         p.add(num1);
    num2 = new Button("2");
                                         p.add(num2);
    num3 = new Button("3"):
                                         p.add(num3);
    comequal = new
                                         p.add(comequal);
Button("=");
                                         p.add(num0);
    num0 = new Button("0");
                                         p.add(num00);
    num00 = new
                                         p.add(dasama);
Button("00");
                                         p.add(exiter);
    dasama = new Button(".");
                                         //Use action lisner....
```

```
num1.addActionListener(this);
                                      commulti.addActionListener(t
                                      his);
num2.addActionListener(this);
                                      comMplas.addActionListener(t
num3.addActionListener(this);
                                      his);
                                      comMminas.addActionListene
num4.addActionListener(this);
                                      r(this);
num5.addActionListener(this);
                                      memo.addActionListener(this);
num6.addActionListener(this);
                                      comclear.addActionListener(th
num7.addActionListener(this);
                                      is);
num8.addActionListener(this);
                                      exiter.addActionListener(this);
                                          addWindowListener(new
num9.addActionListener(this);
                                      WindowAdapter() {// Add
                                      WindowListener to the Frame,
num0.addActionListener(this);
                                             public void
                                      windowClosing(WindowEvent
num00.addActionListener(this
                                      we) // Make a method for
);
                                      closing window.
dasama.addActionListener(this
);
                                               System.exit(3);// Exit
                                      from the window (add int
                                      value to parameter list);
comminas.addActionListener(t
his);
                                             }
complas.addActionListener(thi
                                          });
s);
                                          //create a grid Layout
comequal.addActionListener(t
                                          GridLayout g = new
                                      GridLayout(0, 4, 2, 2);
his);
                                          //add grid lay out to the
comdivide.addActionListener(t
                                      panael
his);
                                          p.setLayout(g);
```

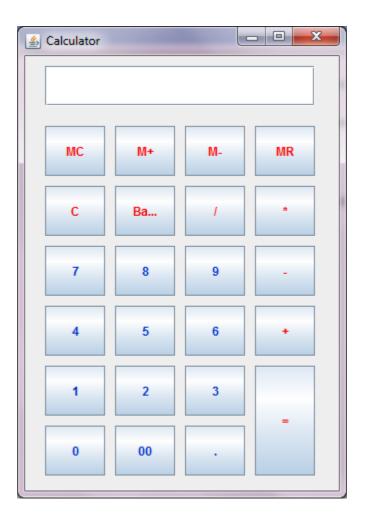
```
}
                                              //if number 4 click..
                                              if (o.equals(num4)) {
  public static void
                                                st = num4.getLabel();
main(String args[]) {//main
                                                st1 = st1 + st;
method..
                                                t.setText(st1);
                                              //if number 5 click...
    new Calculater(); //call
the constractor.
                                              if (o.equals(num5)) {
                                                st = num5.getLabel();
  }
                                                st1 = st1 + st;
                                                t.setText(st1);
  //create an action
Performed
                                              //if number 6 click..
  public void
                                              if (o.equals(num6)) {
actionPerformed(ActionEvent
                                                st = num6.getLabel();
e) {
                                                st1 = st1 + st;
    Object o = e.getSource();
                                                t.setText(st1);
//make a object for recognized
buttons
                                              //if number 7 click..
                                              if (o.equals(num7)) {
                                                st = num7.getLabel();
    // number 1 click
    if (o.equals(num1)) {
                                                st1 = st1 + st;
       st = num1.getLabel();
                                                t.setText(st1);
       st1 = st1 + st:
                                              //if number 8 click..
       t.setText(st1);
                                              if (o.equals(num8)) {
    //if number 2 click..
                                                st = num8.getLabel();
    if (o.equals(num2)) {
                                                st1 = st1 + st;
       st = num2.getLabel();
                                                t.setText(st1);
       st1 = st1 + st;
       t.setText(st1);
                                              //if number 9 click...
                                              if (o.equals(num9)) {
                                                st = num9.getLabel();
    //if number 3 click...
    if (o.equals(num3)) {
                                                st1 = st1 + st;
       st = num3.getLabel();
                                                t.setText(st1);
       st1 = st1 + st;
                                              //if number 0 click..
       t.setText(st1);
```

```
if (o.equals(num0)) {
                                            if (o.equals(comdivide)) {
       st = num0.getLabel();
                                              no1 = t.getText();
       st1 = st1 + st;
                                               make1 =
       t.setText(st1);
                                        Double.parseDouble(no1);
                                              operation =
    //if number 00 click..
                                        comdivide.getLabel();
    if (o.equals(num00)) {
                                              t.setText("");
       st = num00.getLabel();
                                              makesero();
       st1 = st1 + st:
      t.setText(st1);
                                            // if enter the * mark//
    }//if number . click..
                                            if (o.equals(commulti)) {
                                              no1 = t.getText();
    if (o.equals(dasama)) {
                                              make1 =
       st = dasama.getLabel();
                                        Double.parseDouble(no1);
       st1 = st1 + st;
                                              operation =
      t.setText(st1);
                                        commulti.getLabel();
                                              t.setText("");
    // if enter the + mark//
                                              makesero();
    if (o.equals(complas)) {
       no1 = t.getText();
                                            // if enter the M+ mark//
       make1 =
                                            if (o.equals(comMplas)) {
Double.parseDouble(no1);
                                              madd = t.getText();//
                                        Add text to memmory...
       operation =
complas.getLabel();
      t.setText("");
      makesero();
                                            // if enter the M- mark//
                                            if (o.equals(comMminas))
    // if enter the - mark//
                                       {
    if (o.equals(comminas)) {
                                              madd = "";
       no1 = t.getText();
       make1 =
                                            // number MR click
                                            if (o.equals(memo)) {
Double.parseDouble(no1);
       operation =
                                              st = madd:
comminas.getLabel();
                                              st1 = st1 + st:
      t.setText("");
                                              t.setText(st1);
      makesero();
                                            // if enter the CE mark
    // if enter the / mark//
                                        (clear every thing);
```

```
if (o.equals(comclear)) {
                                              make2 =
      st = "";
                                       Double.parseDouble(no2);//co
      st1 = "";
                                       nvert the value as a double
      t.setText("");
                                       number.
                                              if (operation == "+")
    // if enter the Help mark
(clear every thing);
                                       {//if add a + mark button.
    if (o.equals(exiter)) {
      //Create a panel
                                                add();//call the add
      Panel h1 = new Panel();
                                       methord.
      //Place the panel on
Frame.
                                              if (operation == "-") {
      add(h1,
BorderLayout.SOUTH);
                                                minas();//call the
      //Make labels .
                                       minas methord.
      Label label1 = new
Label("MC:Memory
Clear..M+:Memory Add.. ",
                                              if (operation == "/") {
Label.CENTER);
                                                devide();//call the
      Label label2 = new
                                       devide methord.
Label("M-:Memory Clear...
MR:Memory Recall",
                                              if (operation == "*")
Label.LEFT);
                                       {//call the * methord.
      h1.add(label1);//add
label to panel
                                                multifly();
      h1.add(label2);
      250,340(300, 540);//
Resize the calculater.....
    }
                                         void add() {//create a
                                       methord for making addition.
    // if enter the = mark//
    if (o.equals(comequal)) {
                                            answer = make1 + make2:
      no2 = t.getText();//take
                                            totel =
the value of text.
                                       String.valueOf(answer);
                                            t.setText(totel);
                                            makesero();
```

```
}
                                            answer = make1 * make2;
  void minas() {//create a
                                            totel =
methord for minas.
                                       String.valueOf(answer);
                                           t.setText(totel);
    answer = make1 - make2;
                                           makesero();
    totel =
                                         //make st1 and st make 0;
String.valueOf(answer);
    t.setText(totel);
    makesero();
                                         void makesero() {
                                           st1 = "";
  }
                                           st = "";
  void devide() {//create a
                                         }
methord for devide.
    answer = make1 / make2;
    totel =
String.valueOf(answer);
    t.setText(totel);
    makesero();
  }
  void multifly() {//create a
methord for *.
```

## Java swing calculator.



#### Code of java swing calculator.

```
package cal;
                                           ¡Button8 = new
public class Calcu extends
                                      javax.swing.JButton();
javax.swing.JFrame {
                                           ¡Button9 = new
                                      javax.swing.JButton();
String sim;
                                           jButton10 = new
double getfirst;
double memo;
                                      javax.swing.JButton();
                                           iButton11 = new
  public Calcu() {
                                      javax.swing.JButton();
    initComponents();
                                           jButton12 = new
                                      javax.swing.JButton();
                                           jButton13 = new
                                      javax.swing.JButton();
@SuppressWarnings("uncheck
                                           ¡Button14 = new
ed")
                                      javax.swing.JButton();
  // <editor-fold
                                           jButton15 = new
defaultstate="collapsed"
                                      javax.swing.JButton();
desc="Generated Code">
                                           jButton16 = new
  private void
                                      javax.swing.JButton();
                                           iButton17 = new
initComponents() {
                                      javax.swing.JButton();
    jPanel1 = new
                                           jButton18 = new
javax.swing.JPanel();
                                      javax.swing.JButton();
    jTextField1 = new
                                           ¡Button19 = new
javax.swing.JTextField();
                                      javax.swing.JButton();
    jButton1 = new
                                           ¡Button20 = new
javax.swing.JButton();
                                      javax.swing.JButton();
    jButton3 = new
                                           jButton21 = new
javax.swing.JButton();
                                      javax.swing.JButton();
    jButton4 = new
                                           jButton22 = new
javax.swing.JButton();
                                      javax.swing.JButton();
                                           jButton23 = new
    iButton5 = new
javax.swing.JButton();
                                      javax.swing.JButton();
    jButton6 = new
                                           iButton27 = new
javax.swing.JButton();
                                      javax.swing.JButton();
    jButton7 = new
                                           jPanel2 = new
javax.swing.JButton();
                                      javax.swing.JPanel();
```

```
setDefaultCloseOperation(java
x.swing.WindowConstants.EXI
                                      jButton1ActionPerformed(evt);
T ON CLOSE);
    setTitle("Calculator");
                                           });
                                          jPanel1.add(jButton1,
    iPanel1.setLayout(new
                                      new
org.netbeans.lib.awtextra.Abs
                                      org.netbeans.lib.awtextra.Abs
oluteLayout());
                                      oluteConstraints(90, 130, 60,
                                      50));
    ¡TextField1.setFont(new
java.awt.Font("Segoe UI", 1,
14)); // NOI18N
                                      ¡Button3.setForeground(new
                                      java.awt.Color(255, 0, 0));
                                           iButton3.setText("C");
jTextField1.setForeground(ne
w java.awt.Color(0, 51, 204));
                                      jButton3.setPreferredSize(new
¡TextField1.setHorizontalAlign
                                      java.awt.Dimension(47, 23));
ment(javax.swing.JTextField.RI
GHT);
                                      ¡Button3.addActionListener(ne
    ¡Panel1.add(¡TextField1,
                                      java.awt.event.ActionListener()
org.netbeans.lib.awtextra.Abs
                                             public void
oluteConstraints(20, 10, 270,
40));
                                      actionPerformed(java.awt.eve
                                      nt.ActionEvent evt) {
                                      jButton3ActionPerformed(evt);
jButton1.setForeground(new
java.awt.Color(255, 0, 0));
                                           });
¡Button1.setText("Backspace");
                                          ¡Panel1.add(¡Button3,
                                      new
¡Button1.addActionListener(ne
                                      org.netbeans.lib.awtextra.Abs
                                      oluteConstraints(20, 130, 60,
java.awt.event.ActionListener()
                                      50));
      public void
actionPerformed(java.awt.eve
                                      jButton4.setForeground(new
nt.ActionEvent evt) {
                                      java.awt.Color(255, 0, 0));
```

```
¡Button4.setText("MR");
                                             public void
    jPanel1.add(jButton4,
                                      actionPerformed(java.awt.eve
                                      nt.ActionEvent evt) {
new
org.netbeans.lib.awtextra.Abs
                                      jButton6ActionPerformed(evt);
oluteConstraints(230, 70, 60,
50));
                                           });
                                           jPanel1.add(jButton6,
iButton5.setForeground(new
                                      new
java.awt.Color(255, 0, 0));
                                      org.netbeans.lib.awtextra.Abs
    ¡Button5.setText("MC");
                                      oluteConstraints(160, 70, 60,
                                      50));
iButton5.addActionListener(ne
java.awt.event.ActionListener()
                                      jButton7.setForeground(new
                                      java.awt.Color(255, 0, 0));
                                           ¡Button7.setText("M+");
      public void
actionPerformed(java.awt.eve
nt.ActionEvent evt) {
                                      ¡Button7.setPreferredSize(new
                                      java.awt.Dimension(47, 23));
jButton5ActionPerformed(evt);
                                      jButton7.addActionListener(ne
    }):
    ¡Panel1.add(¡Button5,
                                      java.awt.event.ActionListener()
new
org.netbeans.lib.awtextra.Abs
                                             public void
oluteConstraints(20, 70, 60,
                                      actionPerformed(java.awt.eve
50));
                                      nt.ActionEvent evt) {
                                      ¡Button7ActionPerformed(evt);
iButton6.setForeground(new
java.awt.Color(255, 0, 0));
                                           }):
    ¡Button6.setText("M-");
                                           ¡Panel1.add(¡Button7,
¡Button6.addActionListener(ne
                                      org.netbeans.lib.awtextra.Abs
                                      oluteConstraints(90, 70, 60,
                                      50));
java.awt.event.ActionListener()
{
```

```
iButton8.setForeground(new
                                      new
java.awt.Color(0, 51, 204));
                                      org.netbeans.lib.awtextra.Abs
    ¡Button8.setText("7");
                                      oluteConstraints(90, 190, 60,
                                      50));
¡Button8.addActionListener(ne
java.awt.event.ActionListener()
                                      ¡Button10.setForeground(new
                                      java.awt.Color(0, 51, 204));
                                          ¡Button10.setText("9");
      public void
actionPerformed(java.awt.eve
nt.ActionEvent evt) {
                                      ¡Button10.addActionListener(n
jButton8ActionPerformed(evt);
                                      java.awt.event.ActionListener()
                                             public void
    });
    jPanel1.add(jButton8,
                                      actionPerformed(java.awt.eve
                                      nt.ActionEvent evt) {
new
org.netbeans.lib.awtextra.Abs
oluteConstraints(20, 190, 60,
                                      ¡Button10ActionPerformed(ev
50));
                                      t);
                                           });
¡Button9.setForeground(new
                                           ¡Panel1.add(¡Button10,
java.awt.Color(0, 51, 204));
                                      new
    ¡Button9.setText("8");
                                      org.netbeans.lib.awtextra.Abs
                                      oluteConstraints(160, 190, 60,
jButton9.addActionListener(ne
                                      50));
java.awt.event.ActionListener()
                                      ¡Button11.setForeground(new
      public void
                                      java.awt.Color(0, 51, 204));
actionPerformed(java.awt.eve
                                           ¡Button11.setText("4");
nt.ActionEvent evt) {
                                      ¡Button11.addActionListener(n
jButton9ActionPerformed(evt);
                                      ew
                                      iava.awt.event.ActionListener()
    });
```

¡Panel1.add(¡Button9,

```
public void
actionPerformed(java.awt.eve
                                      iButton13.setForeground(new
nt.ActionEvent evt) {
                                      java.awt.Color(0, 51, 204));
                                           ¡Button13.setText("6");
iButton11ActionPerformed(ev
                                      jButton13.addActionListener(n
t);
    });
                                      java.awt.event.ActionListener()
    jPanel1.add(jButton11,
new
                                             public void
org.netbeans.lib.awtextra.Abs
                                      actionPerformed(java.awt.eve
oluteConstraints(20, 250, 60,
                                      nt.ActionEvent evt) {
50));
                                      jButton13ActionPerformed(ev
                                      t);
jButton12.setForeground(new
                                             }
java.awt.Color(0, 51, 204));
                                           });
    iButton12.setText("5");
                                          ¡Panel1.add(¡Button13,
                                      new
¡Button12.addActionListener(n
                                      org.netbeans.lib.awtextra.Abs
                                      oluteConstraints(160, 250, 60,
java.awt.event.ActionListener()
                                      50));
      public void
actionPerformed(java.awt.eve
                                      ¡Button14.setForeground(new
nt.ActionEvent evt) {
                                      java.awt.Color(0, 51, 204));
                                          iButton14.setText("1");
jButton12ActionPerformed(ev
t);
                                      jButton14.addActionListener(n
      }
                                      ew
    });
                                      java.awt.event.ActionListener()
    ¡Panel1.add(¡Button12,
                                             public void
new
                                      actionPerformed(java.awt.eve
org.netbeans.lib.awtextra.Abs
oluteConstraints(90, 250, 60,
                                      nt.ActionEvent evt) {
50));
                                      jButton14ActionPerformed(ev
                                      t);
```

```
java.awt.event.ActionListener()
    });
    jPanel1.add(jButton14,
                                             public void
                                      actionPerformed(java.awt.eve
new
org.netbeans.lib.awtextra.Abs
                                      nt.ActionEvent evt) {
oluteConstraints(20, 310, 60,
50));
                                      ¡Button16ActionPerformed(ev
                                      t):
¡Button15.setForeground(new
                                           });
java.awt.Color(0, 51, 204));
                                           ¡Panel1.add(¡Button16,
    ¡Button15.setText("2");
                                      new
                                      org.netbeans.lib.awtextra.Abs
                                      oluteConstraints(160, 310, 60,
jButton15.addActionListener(n
ew
                                      50));
java.awt.event.ActionListener()
      public void
                                      iButton17.setForeground(new
actionPerformed(java.awt.eve
                                      java.awt.Color(0, 51, 204));
nt.ActionEvent evt) {
                                           ¡Button17.setText("0");
jButton15ActionPerformed(ev
                                      ¡Button17.addActionListener(n
t);
                                      ew
                                      java.awt.event.ActionListener()
    }):
                                      {
    ¡Panel1.add(¡Button15,
                                             public void
                                      actionPerformed(java.awt.eve
new
org.netbeans.lib.awtextra.Abs
                                      nt.ActionEvent evt) {
oluteConstraints(90, 310, 60,
                                      ¡Button17ActionPerformed(ev
50));
                                      t);
                                             }
jButton16.setForeground(new
                                           }):
                                           jPanel1.add(jButton17,
java.awt.Color(0, 51, 204));
    ¡Button16.setText("3");
                                      org.netbeans.lib.awtextra.Abs
jButton16.addActionListener(n
                                      oluteConstraints(20, 370, 60,
                                      50));
ew
```

```
jButton19ActionPerformed(ev
jButton18.setForeground(new
                                      t);
java.awt.Color(0, 51, 204));
                                             }
    iButton18.setText("00");
                                           });
                                           ¡Panel1.add(¡Button19,
¡Button18.addActionListener(n
                                      new
                                      org.netbeans.lib.awtextra.Abs
                                      oluteConstraints(160, 370, 60,
java.awt.event.ActionListener()
                                      50));
      public void
actionPerformed(java.awt.eve
nt.ActionEvent evt) {
                                      ¡Button20.setForeground(new
                                      java.awt.Color(255, 0, 0));
jButton18ActionPerformed(ev
                                           ¡Button20.setText("/");
t);
                                      jButton20.addActionListener(n
    });
    ¡Panel1.add(¡Button18,
                                      java.awt.event.ActionListener()
org.netbeans.lib.awtextra.Abs
                                             public void
                                      actionPerformed(java.awt.eve
oluteConstraints(90, 370, 60,
50));
                                      nt.ActionEvent evt) {
                                      ¡Button20ActionPerformed(ev
jButton19.setForeground(new
                                      t);
java.awt.Color(0, 51, 204));
    ¡Button19.setText(".");
                                           });
                                           jPanel1.add(jButton20,
¡Button19.addActionListener(n
                                      new
                                      org.netbeans.lib.awtextra.Abs
ew
java.awt.event.ActionListener()
                                      oluteConstraints(160, 130, 60,
                                      50));
      public void
actionPerformed(java.awt.eve
nt.ActionEvent evt) {
                                      jButton21.setForeground(new
                                      java.awt.Color(255, 0, 0));
                                           iButton21.setText("*");
```

```
oluteConstraints(230, 190, 60,
jButton21.addActionListener(n
ew
                                      50));
java.awt.event.ActionListener()
                                      jButton23.setForeground(new
      public void
actionPerformed(java.awt.eve
                                      java.awt.Color(255, 0, 0));
nt.ActionEvent evt) {
                                           ¡Button23.setText("+");
¡Button21ActionPerformed(ev
                                      ¡Button23.addActionListener(n
t);
                                      ew
      }
                                      java.awt.event.ActionListener()
    });
    jPanel1.add(jButton21,
                                             public void
                                      actionPerformed(java.awt.eve
new
                                      nt.ActionEvent evt) {
org.netbeans.lib.awtextra.Abs
oluteConstraints(230, 130, 60,
50));
                                      iButton23ActionPerformed(ev
                                      t);
jButton22.setForeground(new
                                           });
java.awt.Color(255, 0, 0));
                                          jPanel1.add(jButton23,
    ¡Button22.setText("-");
                                      new
                                      org.netbeans.lib.awtextra.Abs
¡Button22.addActionListener(n
                                      oluteConstraints(230, 250, 60,
                                      50));
java.awt.event.ActionListener()
      public void
                                      jButton27.setForeground(new
                                      java.awt.Color(255, 0, 0));
actionPerformed(java.awt.eve
                                          ¡Button27.setText("=");
nt.ActionEvent evt) {
¡Button22ActionPerformed(ev
                                      ¡Button27.addActionListener(n
t);
                                      java.awt.event.ActionListener()
    });
    jPanel1.add(jButton22,
new
```

org.netbeans.lib.awtextra.Abs

```
javax.swing.GroupLayout.PREF
      public void
actionPerformed(java.awt.eve
                                      ERRED SIZE)
nt.ActionEvent evt) {
                                          );
                                          layout.setVerticalGroup(
iButton27ActionPerformed(ev
                                      layout.createParallelGroup(jav
t);
                                      ax.swing.GroupLayout.Alignm
    });
                                      ent.LEADING)
    jPanel1.add(jButton27,
                                            .addGroup(layout.creat
new
                                      eSequentialGroup()
org.netbeans.lib.awtextra.Abs
                                              .addComponent(jPan
oluteConstraints(230, 310, 60,
                                      el1,
                                      javax.swing.GroupLayout.PREF
110));
                                      ERRED SIZE, 462,
                                      javax.swing.GroupLayout.PREF
    ¡Panel2.setLayout(new
org.netbeans.lib.awtextra.Abs
                                      ERRED SIZE)
oluteLayout());
                                              .addContainerGap(jav
    jPanel1.add(jPanel2, new
                                      ax.swing.GroupLayout.DEFAUL
org.netbeans.lib.awtextra.Abs
                                      T SIZE, Short.MAX VALUE))
oluteConstraints(0, 0, -1, -1));
                                          );
    javax.swing.GroupLayout
                                          java.awt.Dimension
layout = new
                                      screenSize =
javax.swing.GroupLayout(getC
                                      java.awt.Toolkit.getDefaultToo
ontentPane());
                                      lkit().getScreenSize();
getContentPane().setLayout(la
                                      setBounds((screenSize.width-
                                      330)/2, (screenSize.height-
yout);
                                      480)/2, 330, 480);
layout.setHorizontalGroup(
                                        }// </editor-fold>
layout.createParallelGroup(jav
                                        private void
ax.swing.GroupLayout.Alignm
                                      ¡Button17ActionPerformed(jav
ent.LEADING)
                                      a.awt.event.ActionEvent evt) {
      .addComponent(jPanel
1,
                                      jTextField1.setText(jTextField1
                                      .getText()+"0");
javax.swing.GroupLayout.PREF
ERRED SIZE, 314,
                                        }
```

```
private void
                                       jTextField1.setText(jTextField1
jButton14ActionPerformed(jav
                                       .getText()+"5");
a.awt.event.ActionEvent evt) {
jTextField1.setText(jTextField1
                                         private void
.getText()+"1");
                                       ¡Button13ActionPerformed(jav
                                       a.awt.event.ActionEvent evt) {
                                       ¡TextField1.setText(jTextField1
  private void
                                       .getText()+"6");
¡Button15ActionPerformed(jav
a.awt.event.ActionEvent evt) {
jTextField1.setText(jTextField1
                                         private void
.getText()+"2");
                                       jButton8ActionPerformed(java
                                       .awt.event.ActionEvent evt) {
                                       jTextField1.setText(jTextField1
  private void
jButton16ActionPerformed(jav
                                       .getText()+"7");
a.awt.event.ActionEvent evt) {
jTextField1.setText(jTextField1
                                         private void
.getText()+"3");
                                       iButton9ActionPerformed(java
                                       .awt.event.ActionEvent evt) {
                                       jTextField1.setText(jTextField1
  private void
jButton11ActionPerformed(jav
                                       .getText()+"8");
a.awt.event.ActionEvent evt) {
jTextField1.setText(jTextField1
                                         private void
.getText()+"4");
                                       ¡Button10ActionPerformed(jav
                                       a.awt.event.ActionEvent evt) {
                                       jTextField1.setText(jTextField1
  private void
¡Button12ActionPerformed(jav
                                       .getText()+"9");
a.awt.event.ActionEvent evt) {
```

```
private void
jButton3ActionPerformed(java
                                         }else if(sim.equals("*")){
                                         double tot=getfirst*get2;
.awt.event.ActionEvent evt) {
   ¡TextField1.setText("");
                                         ¡TextField1.setText(""+tot);
                                         }else{
                                         double tot=getfirst / get2;
  private void
                                           ¡TextField1.setText(""+tot);
¡Button1ActionPerformed(java
.awt.event.ActionEvent evt) {
String s=jTextField1.getText();
String
s2=s.substring(0,s.length()-1);
¡TextField1.setText(s2);
                                         private void
                                       jButton22ActionPerformed(jav
                                       a.awt.event.ActionEvent evt) {
  private void
jButton23ActionPerformed(jav
                                       getfirst=Double.parseDouble(j
                                       TextField1.getText().trim());
a.awt.event.ActionEvent evt) {
                                          ¡TextField1.setText("");
getfirst=Double.parseDouble(j
                                          sim="-";
TextField1.getText().trim());
   ¡TextField1.setText("");
   sim="+";
                                         private void
                                       ¡Button21ActionPerformed(jav
                                       a.awt.event.ActionEvent evt) {
  private void
jButton27ActionPerformed(jav
                                       getfirst=Double.parseDouble(j
                                       TextField1.getText().trim());
a.awt.event.ActionEvent evt) {
                                          ¡TextField1.setText("");
   double
                                          sim="*":
get2=Double.parseDouble(iTe
xtField1.getText().trim());
  if(sim.equals("+")){
  double tot=getfirst+get2;
                                         private void
                                       jButton20ActionPerformed(jav
  ¡TextField1.setText(""+tot);
                                       a.awt.event.ActionEvent evt) {
 }else if(sim.equals("-")){
  double tot=getfirst-get2;
                                       getfirst=Double.parseDouble(j
  ¡TextField1.setText(""+tot);
                                       TextField1.getText().trim());
```

```
jTextField1.setText("");
   sim="/";
                                         * @param args the
                                       command line arguments
private void
                                         */
jButton18ActionPerformed(jav
                                         public static void
a.awt.event.ActionEvent evt) {
                                       main(String args[]) {
jTextField1.setText(jTextField1
                                       java.awt.EventQueue.invokeLa
.getText()+"00");
                                       ter(new Runnable() {
                                             public void run() {
                                                new
private void
                                       Calcu().setVisible(true);
jButton5ActionPerformed(java
.awt.event.ActionEvent evt) {
                                           });
}
                                         // Variables declaration - do
private void
                                       not modify
                                         private javax.swing.JButton
¡Button7ActionPerformed(java
.awt.event.ActionEvent evt) {
                                       ¡Button1;
// TODO add your handling
                                         private javax.swing.JButton
code here:
                                       ¡Button10;
                                         private javax.swing.JButton
                                       ¡Button11;
private void
                                         private javax.swing.JButton
jButton6ActionPerformed(java
                                       jButton12;
.awt.event.ActionEvent evt) {
                                         private javax.swing.JButton
// TODO add your handling
                                       jButton13;
code here:
                                         private javax.swing.JButton
                                       ¡Button14;
                                         private javax.swing.JButton
private void
                                       ¡Button15;
jButton19ActionPerformed(jav
                                         private javax.swing.JButton
a.awt.event.ActionEvent evt) {
                                       ¡Button16;
jTextField1.setText(jTextField1
                                         private javax.swing.JButton
.getText()+".");
                                       iButton17;
```

```
private javax.swing.JButton
jButton18;
  private javax.swing.JButton
jButton19;
  private javax.swing.JButton
iButton20;
  private javax.swing.JButton
¡Button21;
  private javax.swing.JButton
¡Button22;
  private javax.swing.JButton
¡Button23;
  private javax.swing.JButton
jButton27;
  private javax.swing.JButton
jButton3;
  private javax.swing.JButton
iButton4;
  private javax.swing.JButton
¡Button5;
  private javax.swing.JButton
¡Button6;
  private javax.swing.JButton
¡Button7;
  private javax.swing.JButton
iButton8;
  private javax.swing.JButton
jButton9;
  private javax.swing.JPanel
¡Panel1;
  private javax.swing.JPanel
¡Panel2;
  private
javax.swing.JTextField
jTextField1;
}
```

