```
1 package hr.unipu.java;
 3 import com.sun.java.swing.plaf.motif.MotifButtonUI;
 4 import com.sun.java.swing.plaf.windows.
  WindowsButtonUI;
 5 import javax.swing.*;
 6 import javax.swing.border.EmptyBorder;
7 import javax.swing.plaf.ButtonUI;
8 import java.awt.*;
9 import java.awt.event.ActionEvent;
10 import java.awt.event.ActionListener;
11 import java.lang.reflect.InvocationTargetException;
12
13 public class Kalkulator extends JFrame implements
   ActionListener {
14
       private double rezultat = 0;
       private String operator = "";
15
16
       private JTextArea display = new JTextArea(4,25);
17
       private boolean prazno = true;
18
       Kalkulator() {
19
20
           setSize(300,450);
21
           setDefaultCloseOperation(WindowConstants.
   EXIT_ON_CLOSE);
22
           setTitle("Kalkulator");
23
           JPanel panel = new JPanel(new BorderLayout(10)
24
   ,10));
25
           Color color = new Color(255,255,0);
           Color front = new Color(128,128,0);
26
27
           panel.setBackground(color);
28
           panel.setBorder(new EmptyBorder(6,4,6,4));
29
           setContentPane(panel);
30
31
           display.setEditable(false);
32
33
           panel.add(display, "North");
34
35
           JPanel panelButtons=new JPanel(new GridLayout
   (4, 4));
36
           String buttonLabels="789/456*123-0.=+";
37
38
           for (int i=0; i<buttonLabels.length(); i++) {</pre>
               JButton b = new JButton(buttonLabels.
39
```

```
39 substring(i, i+1 ));
40
                panelButtons.add(b);
41
                panelButtons.setBackground(front);
                panelButtons.setFont(Font.getFont("Times
42
   New Roman"));
                b.setUI((ButtonUI) MotifButtonUI.createUI
43
   (b));
44
                b.addActionListener(this);
45
46
           panel.add(panelButtons, "Center");
47
           JButton clear = new JButton("Brisanje");
48
           clear.setUI((ButtonUI) WindowsButtonUI.
49
   createUI(clear));
50
           panel.add(clear, "South");
51
           clear.addActionListener(new ActionListener(){
52
                @Override
53
54
                public void actionPerformed(ActionEvent e
   ){
55
                    display.setText("");
56
                    rezultat = 0;
                    operator = "";
57
58
                    prazno = true;
59
                }
           });
60
       }
61
62
       public void actionPerformed(ActionEvent e){
63
64
65
           String broj=e.getActionCommand();
           if ('0' <= broj.charAt(0) && broj.charAt(0)</pre>
66
   ) <= '9' ||
                    broj.equals(".")){
67
68
                if (prazno){
                    display.setText(broj);
69
70
                } else
                    display.setText(display.getText() +
71
   broj);
72
                prazno = false;
73
74
           else{
75
                if(rezultat == 0) rezultat = Double.
   parseDouble(display.getText());
```

```
76
                 double x=Double.parseDouble(display.
    getText());
 77
                 Izračun (x);
 78
                 operator = broj;
 79
                 prazno = true;
 80
            }
 81
        }
 82
 83
 84
        private void Izračun (double x){
             if(operator.equals("+")){
 85
                 rezultat = rezultat + x;
 86
 87
            else if(operator.equals("-"))
 88
                 rezultat = rezultat - x;
 89
            else if (operator.equals("*"))
 90
                 rezultat = rezultat * x;
 91
            else if (operator.equals("/"))
 92
 93
                 rezultat = rezultat / x;
            else if (operator.equals(" = "))
 94
                 System.out.println("Rezultat je: " +
 95
    rezultat);
 96
            display.setText("" + rezultat);
 97
        }
 98
 99
100
        public static void main(String[] args){
101
            try{
102
                 SwingUtilities.invokeAndWait(new
    Runnable(){
103
                     @Override
104
                     public void run(){
105
                         Kalkulator kalkDel = new
    Kalkulator();
106
                         kalkDel.setLocation(60,30);
                         kalkDel.setVisible(true);
107
                     }
108
                 });
109
            }catch (InvocationTargetException |
110
    InterruptedException e){
                 e.printStackTrace();
111
112
            }
113
        }
114 }
```