

20/01/24 lab - program no: 9

```

import java.awt.*;
import java.awt.event.*;
class DividingDemo extends Frame {
    SwingDemo() {
        // create JFrame container
        JFrame jfrm = new JFrame("Dividing App");
        jfrm.setSize(475, 150);
        jfrm.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        jfrm.setLayout(new FlowLayout(1));
        jfrm.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    }
}

```

#### 1) Text label

JLabel jlab = new JLabel("Enter the dividend  
and divisor : ");

// add text for both numbers

JTextField jtf1 = new JTextField(8);

JTextField jtf2 = new JTextField(8);

// calc button

JButton button = new JButton("Calculate");

// answer

JLabel err = new JLabel();

JLabel ans1 = new JLabel();

JLabel ans2 = new JLabel();

JLabel ans3 = new JLabel();

// add in order :)

jfrm.add(jlab); // to display error box

jfrm.add(jtf1);

jfrm.add(jtf2);

jfrm.add(button);

jfrm.add(err);

jfrm.add(ans1);

classmate  
Date \_\_\_\_\_  
Page \_\_\_\_\_

if (m.add (elab)) {  
 if (m.add (anskin)) {  
 ActionListener l = new ActionListener() {  
 public void actionPerformed (ActionEvent e) {  
 System.out.println ("Action event from a  
 text-field");  
 }  
 };  
 elab.addActionListener (l);  
 b1.addActionListener (l);  
 button.addActionListener (new ActionListener() {  
 public void actionPerformed (ActionEvent e) {  
 try {  
 int a = Integer.parseInt (elab.getText ());  
 int b = Integer.parseInt (b1.getText ());  
 int ans = a + b;  
 elab.setText ("In A = " + a);  
 elab.setText ("In B = " + b);  
 ansLab.setText ("Ans = " + ans);  
 } catch (NumberFormatException e) {  
 elab.setText ("");  
 b1.setText ("");  
 ansLab.setText ("");  
 err.setText ("Enter only Integers!");  
 } catch (ArithmeticException e) {  
 elab.setText ("");  
 b1.setText ("");  
 ansLab.setText ("");  
 err.setText ("B should be Non zero!");  
 }  
 }  
 };  
 }  
}

Holiday  
 if (m.add (skin)) {  
 Skin skin = new Skin ();  
 skin.create ();  
 SwingUtilities.invokeLater (new Runnable () {  
 public void run () {  
 new Skin ();  
 }  
 });  
 }  
}

Output

Enter A  
 24  
 Enter B  
 25  
 Ans = 49  
 calc

Function

1) JFrame

2) JTextField

3) derda

for it

for c

do wh

//display frame : a window containing area (1) if runnable(true); times 2 will happen  
if runnable(false); times 2 will happen

```
public static void main(String args[]) {
    //create frame on event dispatching thread
    SwingUtilities.invokeLater(new Runnable() {
        public void run() {
            new swingDemo();
        }
    });
}
```

of 3 information about it runs in master() then (e)

it's not in background ( ) has off. wait() will

and it's not (when evt. myf() takes control

Output: 24 is first remaining digit

12 is second remaining digit

Enter the divisor and dividend :

24      12      Ans = 2

calculator      calculate      calculate

calculator      calculate      calculate

calculator      calculate      calculate

Functions : objects of class JButton (JButton (P

button () function's of JButton class (JButton

1) JFrame is used to create GUI for a simple division opn

2) setsize : set the size of the JFrame

3) setLayout : used to set the layout manager for the JFrame. The layout manager is responsible for arranging the components that are added to the JFrame

- 4) setDefaultCloseOperation() operation: it is used to set the default close operation for the JFrame.
- 5) JLabel: used to create a label component.
- 6) JTextField: used to create a textfield component. A text field component is a GUI component that allows the user to enter and edit a single line of text.
- 7) add() method: it is used to add components to the JFrame. The add() method is called on the JFrame object 'jf'. The add() method takes a single parameter which is the component that should be added to the JFrame.
- 8) addActionListener() method: it is used to add an action listener to a component. An action listener is a GUI component that listens for action events.
- 9) setFont() method: it can be used to set the font of any label component. The setFont() method can be used to change the font of a JLabel component dynamically.