

20/2/24

Date  
Page

## LAB-9

### Source Code:

```
import javax.swing.*;  
import java.awt.*;  
import java.awt.event.*;
```

```
class SwingDemo {  
    SwingDemo()  
    {
```

```
        JFrame jfm = new JFrame("Divides App");  
        jfm.setSize(275, 150);  
        jfm.setLayout(new FlowLayout());  
        jfm.setDefaultCloseOperation(JFrame.  
EXIT_ON_CLOSE);
```

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

```
        JTextField ajtf = new JTextField(8);  
        JTextField btf = new JTextField(8);
```

```
        JButton button = new JButton("Calculate");
```

```
        JLabel ees = new JLabel();
```

```
        JLabel alab = new JLabel();
```

```
        JLabel btab = new JLabel();
```

```
        JLabel ansLab = new JLabel();
```

```
        jfm.add(ees);
```

```
        jfm.add(jlab);
```

```
        jfm.add(ajtf);
```

```
        jfm.add(btf btf);
```

jfm.add(button);  
jfm.add(alab);  
jfm.add(blab);  
jfm.add(anslab);

```
ActionListener l = new ActionListener()
{
    public void actionPerformed(ActionEvent
                                evt)
    {
        System.out.println("Action event from
                            a text field");
    }
};
```

ajtf.addActionListener(l);  
bjtf.addActionListener(l);

```
button.addActionListener(new ActionListener()
{
    public void actionPerformed(ActionEvent
                                evt)
    {
        try {
            int a = Integer.parseInt(ajtf.
                                     getText());

            int b = Integer.parseInt(bjtf.
                                     getText());

            int ans = a+b;

            alab.setText("\nA = " + a);
            blab.setText("\nB = " + b);
            ansLab.setText("\nAns = " + ans);
        }
    }
});
```



```
catch (NumberFormatException e)
{
    alab.setText("");
    blab.setText("");
    anslab.setText("");
    err.setText("Enter only Integers!");
}
catch (ArithmeticException e)
{
    alab.setText("");
    blab.setText("");
    anslab.setText("");
    err.setText("B should be Non Zero!");
}
}
};
```

```
jfm.setVisible(true);
}
```

```
public static void main(String args[])
{
    SwingUtilities.invokeLater(new Runnable()
    {
        public void run()
        {
            new St.SwingDemo();
        }
    });
}
```

## OUTPUT:

Enter the divider and dividend:

40

2

Calculate

A=40 B=2 Ans=20

## AWT Functions

- JFrame: It is a class in Java that is part of the swing library, which is used for creating graphical user interfaces in Java application.
- setSize(): setSize() is a method which is used with components such as JFrame, JPanel etc to set their size.
- setLayout(): It is a method which is used to set the layout manager for a container, such as JFrame or any other container component.
- setDefaultCloseOperation(): It is a method which is used to specify default close operation for a JFrame.
- JLabel: It is a class which is used to display non-editable text on image of a GUI.

For 20/2/24