

### ❖ Calculator Application using Swing Package:

```
package Swing;
```

```
import javax.swing.*;
```

```
import java.awt.event.ActionEvent;
```

```
import java.awt.event.ActionListener;
```

```
public class SwingExample {
```

```
    public static void main(String arg[])
```

```
    {
```

```
        JFrame f = new JFrame("Swing example");
```

```
        f.setLayout(null);
```

```
        f.setSize(500 , 800);
```

```
        //labels
```

```
        JLabel cal=new JLabel("CALCULATOR");
```

```
        cal.setBounds(100 , 50 , 100 , 50);
```

```
        JLabel a=new JLabel("Enter a :");
```

```
        a.setBounds(50 , 150 , 100 , 50);
```

```
        JLabel b=new JLabel("Enter b :");
```

```
        b.setBounds(50 , 250 , 100 , 50);
```

```
        JLabel res=new JLabel("Result :");
```

```
        res.setBounds(50 , 450 , 100 , 50);
```

```
        JLabel showres = new JLabel();
```

```
        showres.setBounds(200 , 450 , 100 , 50);
```

```
        //textfield
```

```
        JTextField t1= new JTextField();
```

```
        t1.setBounds(200 , 150 , 100 , 50);
```

```
        JTextField t2= new JTextField();
```

```
        t2.setBounds(200 , 250 , 100 , 50);
```

```
        //buttons
```

```
        JButton add= new JButton("+");
```

```
        add.setBounds(50 , 350 , 50 , 50);
```

```
        JButton sub= new JButton("-");
```

```
        sub.setBounds(120 , 350 , 50 , 50);
```

```
JButton mul= new JButton("*");  
mul.setBounds(190 , 350 , 50 , 50);
```

```
JButton div= new JButton("/");  
div.setBounds(260 , 350 , 50 , 50);
```

```
//action events  
add.addActionListener(new ActionListener() {  
    @Override  
    public void actionPerformed(ActionEvent e) {  
        //fetch(2) , add , show  
        int p = Integer.parseInt(t1.getText());  
        int q= Integer.parseInt(t2.getText());  
        int sum= p +q;  
        showres.setText(String.valueOf(sum));  
    }  
});  
  
sub.addActionListener(new ActionListener() {  
    @Override  
    public void actionPerformed(ActionEvent e) {  
        //fetch(2) , add , show  
        int p = Integer.parseInt(t1.getText());  
        int q= Integer.parseInt(t2.getText());  
        int subtraction= p - q;  
        showres.setText(String.valueOf(subtraction));  
    }  
});  
  
mul.addActionListener(new ActionListener() {  
    @Override  
    public void actionPerformed(ActionEvent e) {  
        //fetch(2) , add , show  
        int p = Integer.parseInt(t1.getText());  
        int q= Integer.parseInt(t2.getText());  
        int multiplication= p *q;  
        showres.setText(String.valueOf(multiplication));  
    }  
});  
  
div.addActionListener(new ActionListener() {  
    @Override  
    public void actionPerformed(ActionEvent e) {  
        //fetch(2) , add , show  
        int p = Integer.parseInt(t1.getText());  
        int q= Integer.parseInt(t2.getText());
```

```
        int division= p /q;
        showres.setText(String.valueOf(division));
    }
});

//adding labels
f.add(cal);
f.add(a);
f.add(b);
f.add(res);
//adding textfields
f.add(t1);
f.add(t2);
f.add(showres);
//adding buttons
f.add(add);
f.add(sub);
f.add(mul);
f.add(div);

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

Output:

