

❖ **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:



Swing example

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□

×

CALCULATOR

Enter a :

10

Enter b :

5

+

-

*

/

Result :

2