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package ir.ac.mahshahriau.javaclass.test;

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

public class GUIDemo extends JFrame implements ActionListener
{
    // Declare three text fields
    private JTextField jtfNum1, jtfNum2, jtfResult;

    // Declare "Add" and "Sub" buttons
    private JButton jbtAdd, jbtSub;

    // Constructor
    public GUIDemo()
    {
        setTitle("GUI Demo");
        setLocation(300, 300);

        // Use panel p1 to group text fields
        JPanel p1 = new JPanel();
        p1.setLayout(new FlowLayout());

        p1.add(new Label("Number 1"));
        p1.add(jtfNum1 = new JTextField(3)); // 3 is the width of the field

        p1.add(new Label("Number 2"));
        p1.add(jtfNum2 = new JTextField(3));

        p1.add(new Label("Result"));
        p1.add(jtfResult= new JTextField(4));
        jtfResult.setEditable(false); // Set jtfResult non-editable

        // Use panel p2 for the button
        JPanel p2 = new JPanel();
        p2.setLayout(new FlowLayout());

        jbtAdd= new JButton("Add");
        p2.add(jbtAdd);
        p2.add(jbtSub= new JButton("Sub"));

        // Set BorderLayout for the frame and add panels to the frame
        getContentPane().setLayout(new BorderLayout());
        getContentPane().add(p1,BorderLayout.CENTER);
        getContentPane().add(p2,BorderLayout.SOUTH);

        // Register listeners
        jbtAdd.addActionListener(this);
        jbtSub.addActionListener(this);
    }

    // Handle the add operation
    public void actionPerformed(ActionEvent e)
    {
        if (e.getSource() == jbtAdd) // if jbtAdd is clicked
        {
            // Get int values from text fields

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int num1 = (Integer.parseInt(jtfNum1.getText()));
int num2 = (Integer.parseInt(jtfNum2.getText()));
int result = num1 + num2;

// Set result inTextField jtfResult
jtfResult.setText(String.valueOf(result));
}

// Handle the sub operation
if (e.getSource() == jbtSub)
{
    // Get int values from text fields
    int num1 = (Integer.parseInt(jtfNum1.getText()));
    int num2 = (Integer.parseInt(jtfNum2.getText()));
    int result = num1 - num2;

    // Set result inTextField jtfResult
    jtfResult.setText(String.valueOf(result));
}
}

// Main method
public static void main(String[] args)
{
    GUIDemo frame = new GUIDemo();
    frame.pack();
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.setVisible(true);
}
```