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

class A extends JFrame implements ActionListener{
    static double a, b, result;
    static int operator;
    String s0, s1, s2;
    JFrame f;
    JTextField tf;
    JButton b0, b1, b2, b3, b4, b5, b6, b7, b8, b9, bmul, bsub, badd, bdiv, bdec,
    beq, clear;
    A(){
        f = new JFrame("Calculator");

        b0 = new JButton("0");b1 = new JButton("1");
        b2 = new JButton("2");b3 = new JButton("3");
        b4 = new JButton("4");b5 = new JButton("5");
        b6 = new JButton("6");b7 = new JButton("7");
        b8 = new JButton("8");b9 = new JButton("9");
        bmul = new JButton("*");bsub = new JButton("-");
        badd = new JButton("+");bdiv = new JButton("/");
        bdec = new JButton(".");beq = new JButton("=");
        clear = new JButton("C");

        tf = new JTextField(16);

        JPanel p = new JPanel();

        b0.addActionListener(this);b1.addActionListener(this);b2.addActionListener(this)
        ;

        b3.addActionListener(this);b4.addActionListener(this);b5.addActionListener(this)
        ;b6.addActionListener(this);

        b7.addActionListener(this);b8.addActionListener(this);b9.addActionListener(this)
        ;bmul.addActionListener(this);

        bsub.addActionListener(this);badd.addActionListener(this);clear.addActionListene
        r(this);

        bdiv.addActionListener(this);bdec.addActionListener(this);beq.addActionListener(
        this);

        p.add(tf);p.add(b0);p.add(b1);
        p.add(b2);p.add(b3);p.add(b4);
        p.add(b5);p.add(b6);p.add(b7);p.add(b8);p.add(b9);
        p.add(badd);p.add(bsub);p.add(bmul);p.add(bdiv);
        p.add(bdec);p.add(beq);p.add(clear);

        f.add(p);
        f.setVisible(true);
        f.setSize(200,250);
    }
    public void actionPerformed(ActionEvent e){
        if(e.getSource()==b1)
            tf.setText(tf.getText().concat("1"));
        if(e.getSource()==b2)
            tf.setText(tf.getText().concat("2"));
        if(e.getSource()==b3)
            tf.setText(tf.getText().concat("3"));
        if(e.getSource()==b4)
            tf.setText(tf.getText().concat("4"));
    }
}

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        if(e.getSource()==b5)
            tf.setText(tf.getText().concat("5"));
        if(e.getSource()==b6)
            tf.setText(tf.getText().concat("6"));
        if(e.getSource()==b7)
            tf.setText(tf.getText().concat("7"));
        if(e.getSource()==b8)
            tf.setText(tf.getText().concat("8"));
        if(e.getSource()==b9)
            tf.setText(tf.getText().concat("9"));
        if(e.getSource()==b0)
            tf.setText(tf.getText().concat("0"));
        if(e.getSource()==bdec)
            tf.setText(tf.getText().concat("."));
        if(e.getSource()==badd){
            a=Double.parseDouble(tf.getText());
            operator=1;
            tf.setText("");
        }
        if(e.getSource()==bsub){
            a=Double.parseDouble(tf.getText());
            operator=2;
            tf.setText("");
        }
        if(e.getSource()==bmul){
            a=Double.parseDouble(tf.getText());
            operator=3;
            tf.setText("");
        }
        if(e.getSource()==bdiv){
            a=Double.parseDouble(tf.getText());
            operator=4;
            tf.setText("");
        }
        if(e.getSource()==beq){
            b=Double.parseDouble(tf.getText());
            switch(operator){
                case 1: result=a+b;
                    break;
                case 2: result=a-b;
                    break;
                case 3: result=a*b;
                    break;
                case 4: result=a/b;
                    break;
                default: result=0;
            }
            tf.setText(""+result);
        }
        if(e.getSource()==clear)
            tf.setText("");
        if(e.getSource()==bdec){
            String s=tf.getText();
            tf.setText("");
            for(int i=0;i<s.length()-1;i++)
                tf.setText(tf.getText()+s.charAt(i));
        }
    }
}

class calcu{
    public static void main(String args[]) {
        new A();
    }
}

```