

/*

Class of Calculator

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package CalculatorPackage;
import javax.swing.*.*;
import java.awt.*.*;
import java.awt.event.*;
import javax.swing.border.Border;

public class Calculator implements ActionListener{
    JFrame frame;
    JTextField textfield;
    JButton[] numberButtons = new JButton[10];
    JButton[] functionButtons = new JButton[9];
    JButton addButton,subButton,mulButton,divButton;
    JButton decButton, equButton, delButton, clrButton, negButton;
    JPanel panel;

    Font myFont = new Font("Ink Free",Font.BOLD,30);

    double num1=0,num2=0,result=0;
    char operator;

    Calculator(){

        frame = new JFrame("Calculator");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(420, 550);
        frame.setLayout(null);

        textfield = new JTextField();
        textfield.setBounds(50, 25, 300, 50);
        textfield.setFont(myFont);
        textfield.setEditable(false);
        textfield.setBackground(Color.white);
        textfield.setBorder(BorderFactory.createLineBorder(Color.black));
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addButton = new JButton("+");
subButton = new JButton("-");
mulButton = new JButton("*");
divButton = new JButton("/");
decButton = new JButton(".");
equButton = new JButton("=");
delButton = new JButton("Del");
clrButton = new JButton("Clr");
negButton = new JButton("-");

functionButtons[0] = addButton;
functionButtons[1] = subButton;
functionButtons[2] = mulButton;
functionButtons[3] = divButton;
functionButtons[4] = decButton;
functionButtons[5] = equButton;
functionButtons[6] = delButton;
functionButtons[7] = clrButton;
functionButtons[8] = negButton;

for(int i =0;i<9;i++) {
    functionButtons[i].addActionListener(this);
    functionButtons[i].setFont(myFont);
    functionButtons[i].setFocusable(false);
    functionButtons[i].setBorder(BorderFactory.createLineBorder(Color.black));
}

for(int i =0;i<10;i++) {
    numberButtons[i] = new JButton(String.valueOf(i));
    numberButtons[i].addActionListener(this);
    numberButtons[i].setFont(myFont);
    numberButtons[i].setFocusable(false);
    numberButtons[i].setBorder(BorderFactory.createLineBorder(Color.black));
}

negButton.setBounds(50,430,95,50);
delButton.setBounds(150,430,95,50);
clrButton.setBounds(250,430,95,50);

panel = new JPanel();
panel.setBounds(50, 100, 300, 300);
panel.setLayout(new GridLayout(4,4,10,10));

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        panel.add(numberButtons[1]);
        panel.add(numberButtons[2]);
        panel.add(numberButtons[3]);
        panel.add(addButton);
        panel.add(numberButtons[4]);
        panel.add(numberButtons[5]);
        panel.add(numberButtons[6]);
        panel.add(subButton);
        panel.add(numberButtons[7]);
        panel.add(numberButtons[8]);
        panel.add(numberButtons[9]);
        panel.add(mulButton);
        panel.add(decButton);
        panel.add(numberButtons[0]);
        panel.add(equButton);
        panel.add(divButton);

        frame.add(panel);
        frame.add(negButton);
        frame.add(delButton);
        frame.add(clrButton);
        frame.add(textfield);
        frame.setVisible(true);
    }

    public static void main(String[] args) {

        Calculator calc = new Calculator();
    }

    @Override
    public void actionPerformed(ActionEvent e) {

        for(int i=0;i<10;i++) {
            if(e.getSource() == numberButtons[i]) {
                textfield.setText(textfield.getText().concat(String.valueOf(i)));
            }
        }
        if(e.getSource()==decButton) {
            textfield.setText(textfield.getText().concat("."));
        }
        if(e.getSource()==addButton) {
            num1 = Double.parseDouble(textfield.getText());

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```

        operator = '+';
        textfield.setText("");
    }
    if(e.getSource()==subButton) {
        num1 = Double.parseDouble(textfield.getText());
        operator = '-';
        textfield.setText("");
    }
    if(e.getSource()==mulButton) {
        num1 = Double.parseDouble(textfield.getText());
        operator = '*';
        textfield.setText("");
    }
    if(e.getSource()==divButton) {
        num1 = Double.parseDouble(textfield.getText());
        operator = '/';
        textfield.setText("");
    }
    if(e.getSource()==equButton) {
        num2=Double.parseDouble(textfield.getText());

        switch(operator) {
            case '+':
                result=num1+num2;
                break;
            case '-':
                result=num1-num2;
                break;
            case '*':
                result=num1*num2;
                break;
            case '/':
                result=num1/num2;
                break;
        }
        textfield.setText(String.valueOf(result));
        num1=result;
    }
    if(e.getSource()==clrButton) {
        textfield.setText("");
    }
    if(e.getSource()==delButton) {
        String string = textfield.getText();

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        textfield.setText("");
        for(int i=0;i<string.length()-1;i++) {
            textfield.setText(textfield.getText()+string.charAt(i));
        }
    }
    if(e.getSource()==negButton) {
        double temp = Double.parseDouble(textfield.getText());
        temp*=-1;
        textfield.setText(String.valueOf(temp));
    }
}
```