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public class Calculator {
    public class Calculator implements ActionListener {
        JFrame frame;
        JTextField textfield;
        JButton numberButtons[] = new JButton[10];
        JButton functionButtons[] = new JButton[10];
        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.setResizable(false);
            frame.setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
            frame.setSize(500, 500);
            frame.setLayout(null);
            textfield = new JTextField();
            textfield.setBounds(50, 25, 300, 50);
            textfield.setFont(myFont);
            textfield.setEditable(false);
            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);
            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);
            }
            negButton.setBounds(50, 430, 100, 50);
            delButton.setBounds(150, 430, 100, 50);
            clrButton.setBounds(250, 430, 100, 50);
            panel = new JPanel();
            panel.setBounds(50, 100, 300, 300);
            panel.setLayout(new GridLayout(4, 4, 10, 10));
            panel.add(numberButtons[1]);
            panel.add(numberButtons[2]);
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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());
        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;
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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();
            textfield.setText("");
            for (int i = 0; i < string.length() - 1; i++) {</pre>
                textfield.setText(textfield.getText() + string.charAt(i));
            }
        if (e.getSource() == negButton) {
            double temp = Double.parseDouble(textfield.getText());
            temp *= -1;
            textfield.setText(String.valueOf(temp));
   }
}
```