```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
public class NewClass extends JFrame implements ActionListener {
    private JTextField textField;
    private JButton[] numberButtons = new JButton[10];
    private JButton addButton, subButton, mulButton, divButton, eqButton, clrButton;
    private double num1 = 0;
    private char operator = ' ';
    public NewClass() {
        setTitle("Calculator");
        setSize(300, 400);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        //setLocationRelativeTo(null);
        setLayout(null);
        // Frame background
        getContentPane().setBackground(Color.LIGHT_GRAY);
        // Text field
        textField = new JTextField();
        textField.setBounds(30, 20, 220, 40);
        textField.setEditable(false);
        textField.setHorizontalAlignment(SwingConstants.RIGHT);
        textField.setBackground(Color.BLACK);
        textField.setForeground(Color.RED);
        textField.setFont(new Font("Arial", Font.BOLD, 18));
```

```
add(textField);


// Number buttons
for (int i = 0; i < 10; i++) {
    numberButtons[i] = new JButton(String.valueOf(i));
    numberButtons[i].addActionListener(this);
    numberButtons[i].setBackground(Color.BLACK);
    numberButtons[i].setForeground(Color.RED);
    numberButtons[i].setFont(new Font("Arial", Font.BOLD, 18));
}
// Operation buttons
addButton = new JButton("+");
subButton = new JButton("-");
mulButton = new JButton("*");
divButton = new JButton("/");
eqButton = new JButton("=");
clrButton = new JButton("C");


JButton[] opButtons = {addButton, subButton, mulButton, divButton, eqButton, clrButton};
Color opColor = new Color(255, 165, 0);
for (JButton btn : opButtons) {
    btn.addActionListener(this);
    btn.setBackground(opColor);
    btn.setForeground(Color.BLACK);
    btn.setFont(new Font("Arial", Font.BOLD, 18));
```

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}
// Panel for buttons
JPanel panel = new JPanel();
panel.setBounds(30, 70, 220, 220);
panel.setLayout(new GridLayout(4, 4, 5, 5));
panel.setBackground(Color.WHITE);

// Add buttons to panel
panel.add(numberButtons[7]);
panel.add(numberButtons[8]);
panel.add(numberButtons[9]);
panel.add(addButton);

panel.add(numberButtons[4]);
panel.add(numberButtons[5]);
panel.add(numberButtons[6]);
panel.add(subButton);

panel.add(numberButtons[1]);
panel.add(numberButtons[2]);
panel.add(numberButtons[3]);
panel.add(mulButton);

panel.add(numberButtons[0]);
panel.add(clrButton);
```

```
    panel.add(eqButton);
    panel.add(divButton);
    add(panel);
    setVisible(true);
}

@Override
public void actionPerformed(ActionEvent e) {
    for (int i = 0; i < 10; i++) {
        if (e.getSource() == numberButtons[i]) {
            textField.setText(textField.getText() + i);
        }
    }

    if (e.getSource() == addButton || e.getSource() == subButton ||
        e.getSource() == mulButton || e.getSource() == divButton) {
        if (!textField.getText().isEmpty()) {
            num1 = Double.parseDouble(textField.getText());
            operator = ((JButton)e.getSource()).getText().charAt(0);
            textField.setText(num1 + " " + operator + " "); // show first number and operator
        }
    }
    if (e.getSource() == eqButton) {
        try {
            String[] parts = textField.getText().split(" ");
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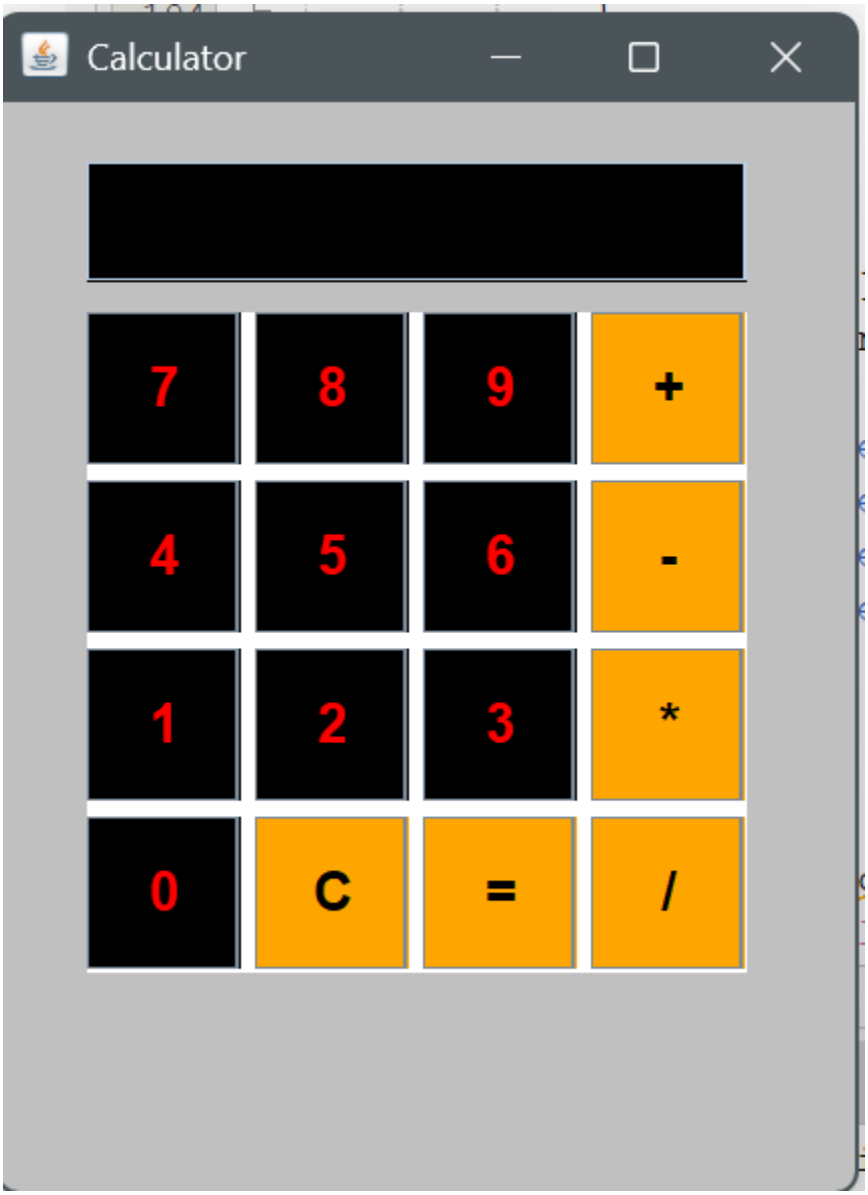
            double num2 = Double.parseDouble(parts[2]);
            switch (operator) {
               case '+': textField.setText("" + (num1 + num2)); break;
               case '-': textField.setText("" + (num1 - num2)); break;
               case '*': textField.setText("" + (num1 * num2)); break;
               case '/':
                  if (num2 != 0) textField.setText("" + (num1 / num2));
                  else textField.setText("Error");
                  break;
            }
         } catch (Exception ex) {
            textField.setText("Error");
         }
      }
      if (e.getSource() == clrButton) {
         textField.setText("");
         num1 = 0;
         operator = ' ';
      }
   }
   public static void main(String[] args) {
      new NewClass();
   }
}
```


Calculator
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+
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