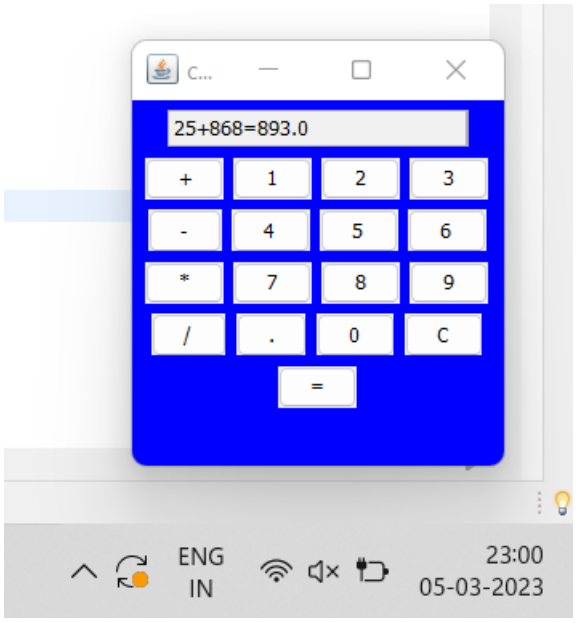
Code:

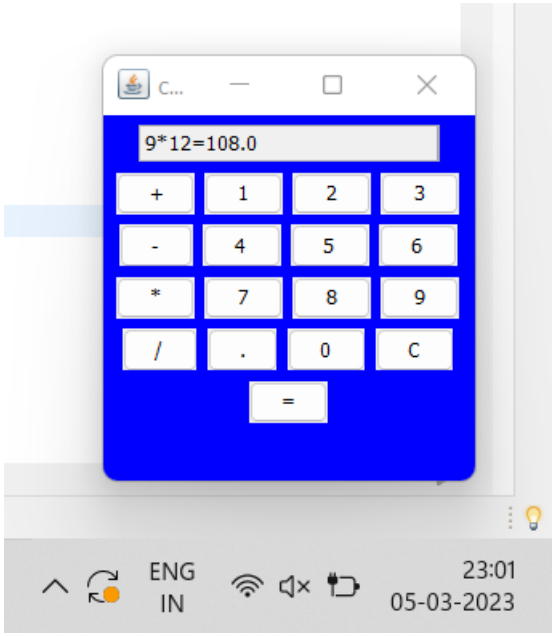
```
import java.awt.event.*;
import javax.swing.*;
import java.awt.*;
class calculator extends JFrame implements ActionListener {

	static JFrame f;

	static JTextField l;

	String s0, s1, s2;

	calculator()
	{
		s0 = s1 = s2 = "";
	}

	// main function
	public static void main(String args[])
	{
		// create a frame
		f = new JFrame("calculator");

		try {

	UIManager.setLookAndFeel(UIManager.getSystemLookAndFeelClassName());
		}
		catch (Exception e) {
			System.err.println(e.getMessage());
		}

		calculator c = new calculator();

		l = new JTextField(16);

		l.setEditable(false);

		JButton b0, b1, b2, b3, b4, b5, b6, b7, b8, b9, ba, bs, bd, bm,
be, beq, beq1;

		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");

		beq1 = new JButton("=");

		ba = new JButton("+");
		bs = new JButton("-");
		bd = new JButton("/");
		bm = new JButton("*");
		beq = new JButton("C");

		be = new JButton(".");

		JPanel p = new JPanel();
```

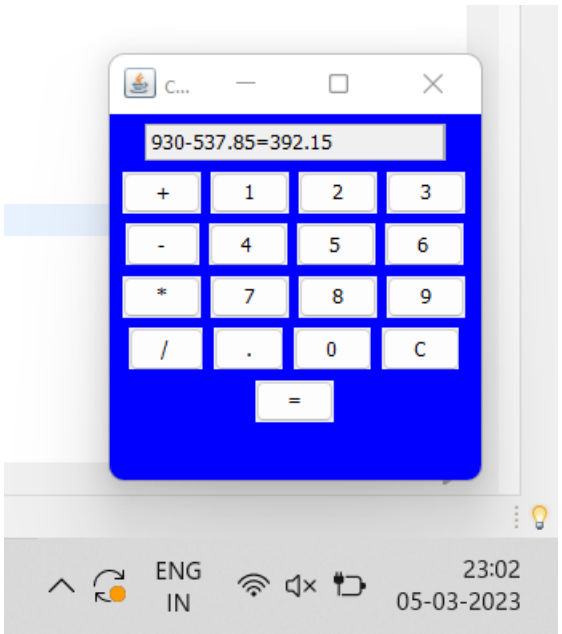
```
            bm.addActionListener(c);
            bd.addActionListener(c);
            bs.addActionListener(c);
            ba.addActionListener(c);
            b9.addActionListener(c);
            b8.addActionListener(c);
            b7.addActionListener(c);
            b6.addActionListener(c);
            b5.addActionListener(c);
            b4.addActionListener(c);
            b3.addActionListener(c);
            b2.addActionListener(c);
            b1.addActionListener(c);
            b0.addActionListener(c);
            be.addActionListener(c);
            beq.addActionListener(c);
            beq1.addActionListener(c);

            p.add(l);
            p.add(ba);
            p.add(b1);
            p.add(b2);
            p.add(b3);
            p.add(bs);
            p.add(b4);
            p.add(b5);
            p.add(b6);
            p.add(bm);
            p.add(b7);
            p.add(b8);
            p.add(b9);
            p.add(bd);
            p.add(be);
            p.add(b0);
            p.add(beq);
            p.add(beq1);

            p.setBackground(Color.blue);

            f.add(p);

            f.setSize(200, 220);
            f.show();
      }
      public void actionPerformed(ActionEvent e)
      {
            String s = e.getActionCommand();

            if ((s.charAt(0) >= '0' && s.charAt(0) <= '9') || s.charAt(0)
== '.') {

                  if (!s1.equals(""))
                        s2 = s2 + s;
                  else
                        s0 = s0 + s;


                  l.setText(s0 + s1 + s2);
            }
            else if (s.charAt(0) == 'C') {

                  s0 = s1 = s2 = "";


                  l.setText(s0 + s1 + s2);
            }
```

```
            else if (s.charAt(0) == '=') {

                  double te;


                  if (s1.equals("+"))
                        te = (Double.parseDouble(s0) +
Double.parseDouble(s2));
                  else if (s1.equals("-"))
                        te = (Double.parseDouble(s0) -
Double.parseDouble(s2));
                  else if (s1.equals("/"))
                        te = (Double.parseDouble(s0) /
Double.parseDouble(s2));
                  else
                        te = (Double.parseDouble(s0) *
Double.parseDouble(s2));


                  l.setText(s0 + s1 + s2 + "=" + te);

                  s0 = Double.toString(te);

                  s1 = s2 = "";
            }
            else {

                  if (s1.equals("") || s2.equals(""))
                        s1 = s;

                  else {
                        double te;

                        if (s1.equals("+"))
                              te = (Double.parseDouble(s0) +
Double.parseDouble(s2));
                        else if (s1.equals("-"))
                              te = (Double.parseDouble(s0) -
Double.parseDouble(s2));
                        else if (s1.equals("/"))
                              te = (Double.parseDouble(s0) /
Double.parseDouble(s2));
                        else
                              te = (Double.parseDouble(s0) *
Double.parseDouble(s2));

                        s0 = Double.toString(te);

                        s1 = s;

                        s2 = "";
                  }

                  l.setText(s0 + s1 + s2);
            }
      }
}
```

Output:


C...
25+868=893.0
+ 1 2 3
- 4 5 6
* 7 8 9
/ . 0 C
=
ENG
IN
23:00
05-03-2023


C...
9*12=108.0
+ 1 2 3
- 4 5 6
* 7 8 9
/ . 0 C
=
ENG
IN
23:01
05-03-2023


C...
930-537.85=392.15
+ 1 2 3
- 4 5 6
* 7 8 9
/ . 0 C
=
ENG
IN
23:02
05-03-2023