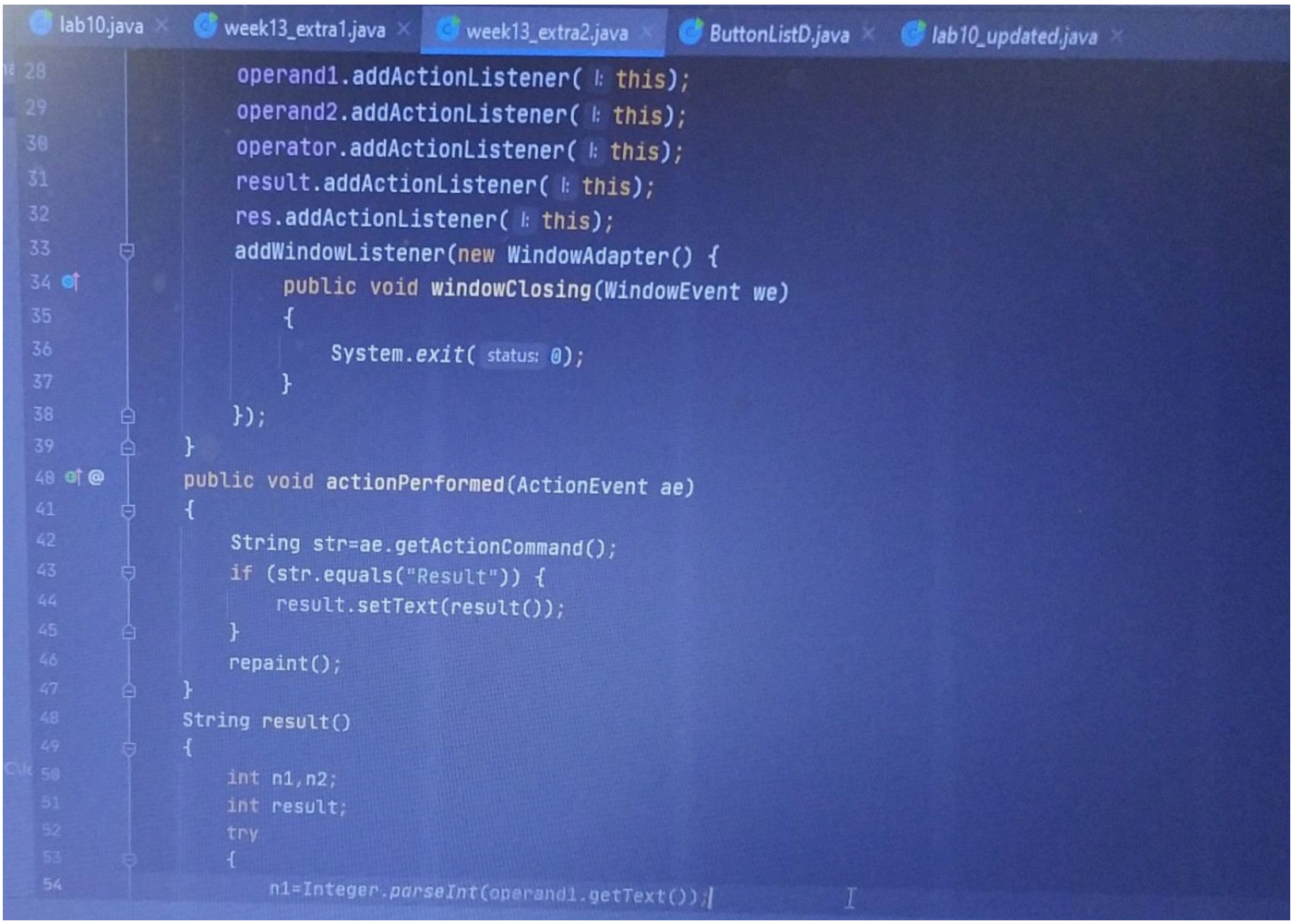
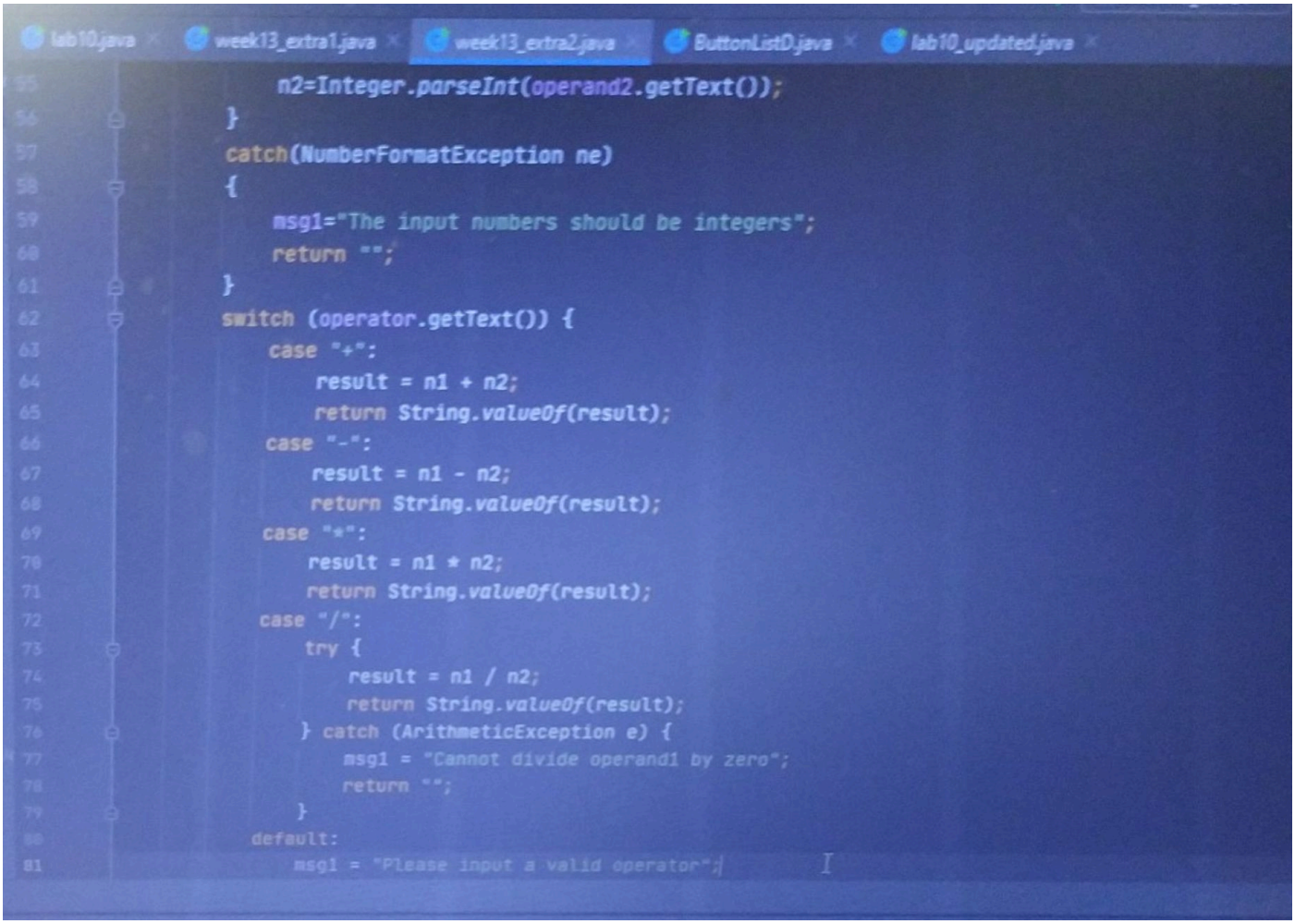
lab10.java | week13_extra1.java | week13_extra2.java | ButtonListD.java | lab10_updated.java

```
import java.awt.*;
import java.awt.event.*;
public class week13_extra2 extends Frame implements ActionListener{
    TextField operand1,operand2,operator,result;
    Button res;
    String msg1="";
    public week13_extra2()
    {
        setLayout(new FlowLayout());
        operand1=new TextField( columns: 8);
        operand2=new TextField( columns: 8);
        operator=new TextField( columns: 8);
        result=new TextField( columns: 10);
        Label op1=new Label( text: "Operand1:",Label.RIGHT);
        Label op2=new Label( text: "Operand2:",Label.RIGHT);
        Label opr=new Label( text: "Operator",Label.RIGHT);
        Label r=new Label( text: "Result:",Label.RIGHT);
        res=new Button( label: "Result");
        add(op1);
        add(operand1);
        add(op2);
        add(operand2);
        add(opr);
        add(operator);
        add(r);
        add(result);
        add(res);
```


lab10.java
week13_extra1.java
week13_extra2.java
ButtonListD.java
lab10_updated.java
operand1.addActionListener(l: this);
operand2.addActionListener(l: this);
operator.addActionListener(l: this);
result.addActionListener(l: this);
res.addActionListener(l: this);
addWindowListener(new WindowAdapter() {
public void windowClosing(WindowEvent we)
{
System.exit(status: 0);
}
});
}
public void actionPerformed(ActionEvent ae)
{
String str=ae.getActionCommand();
if (str.equals("Result")) {
result.setText(result());
}
repaint();
}
String result()
{
int n1,n2;
int result;
try
{
n1=Integer.parseInt(operand1.getText());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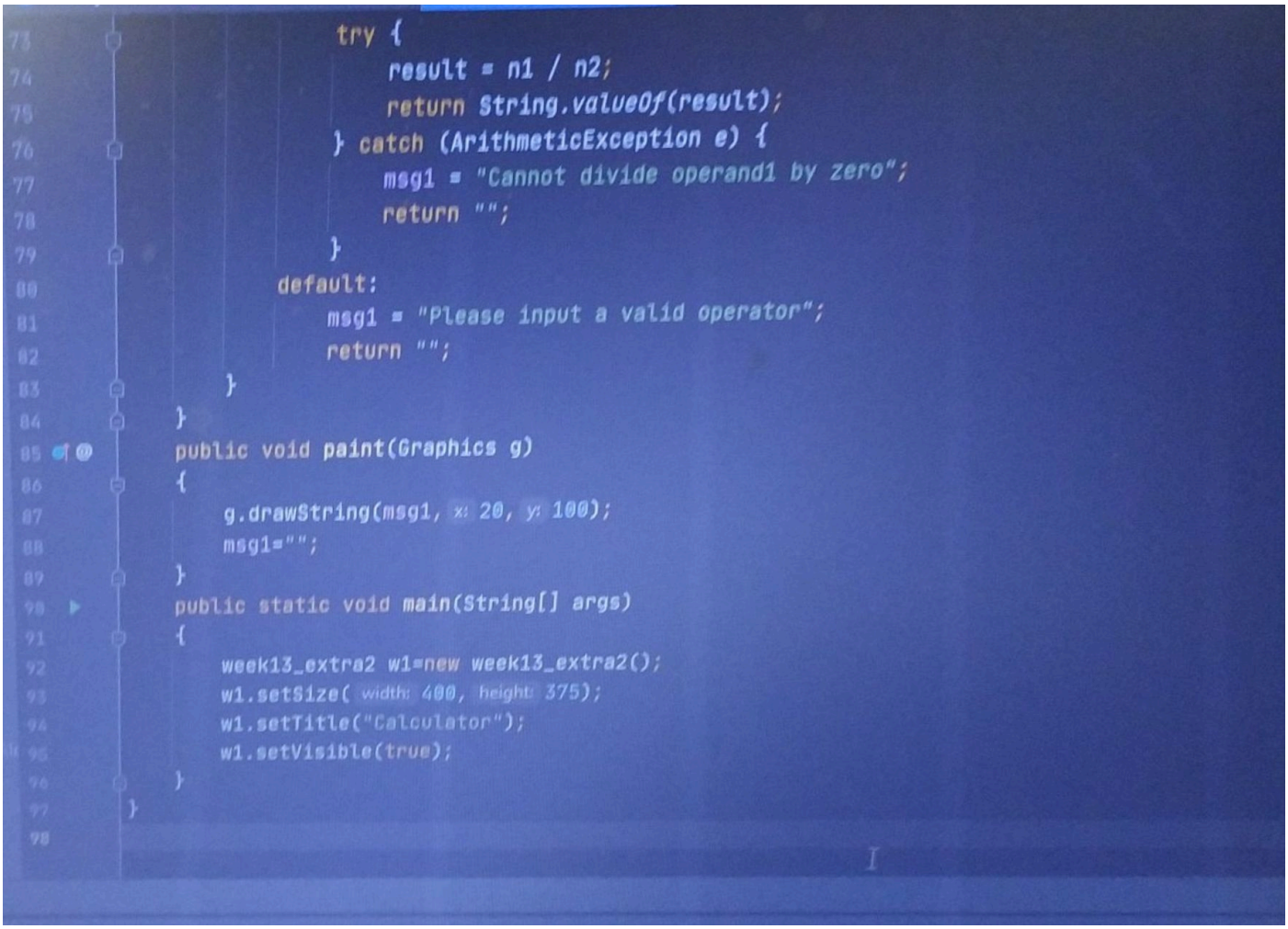
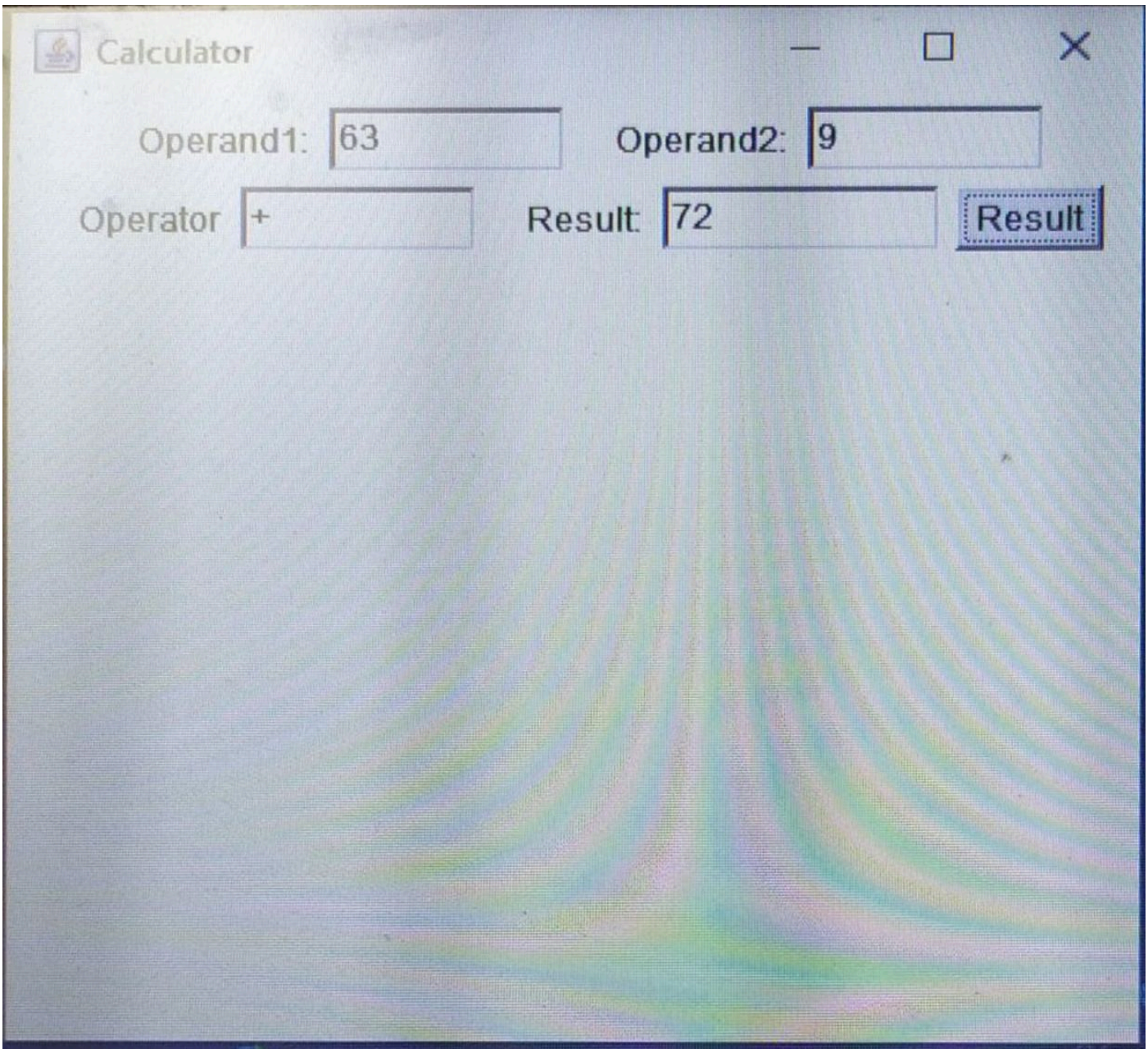
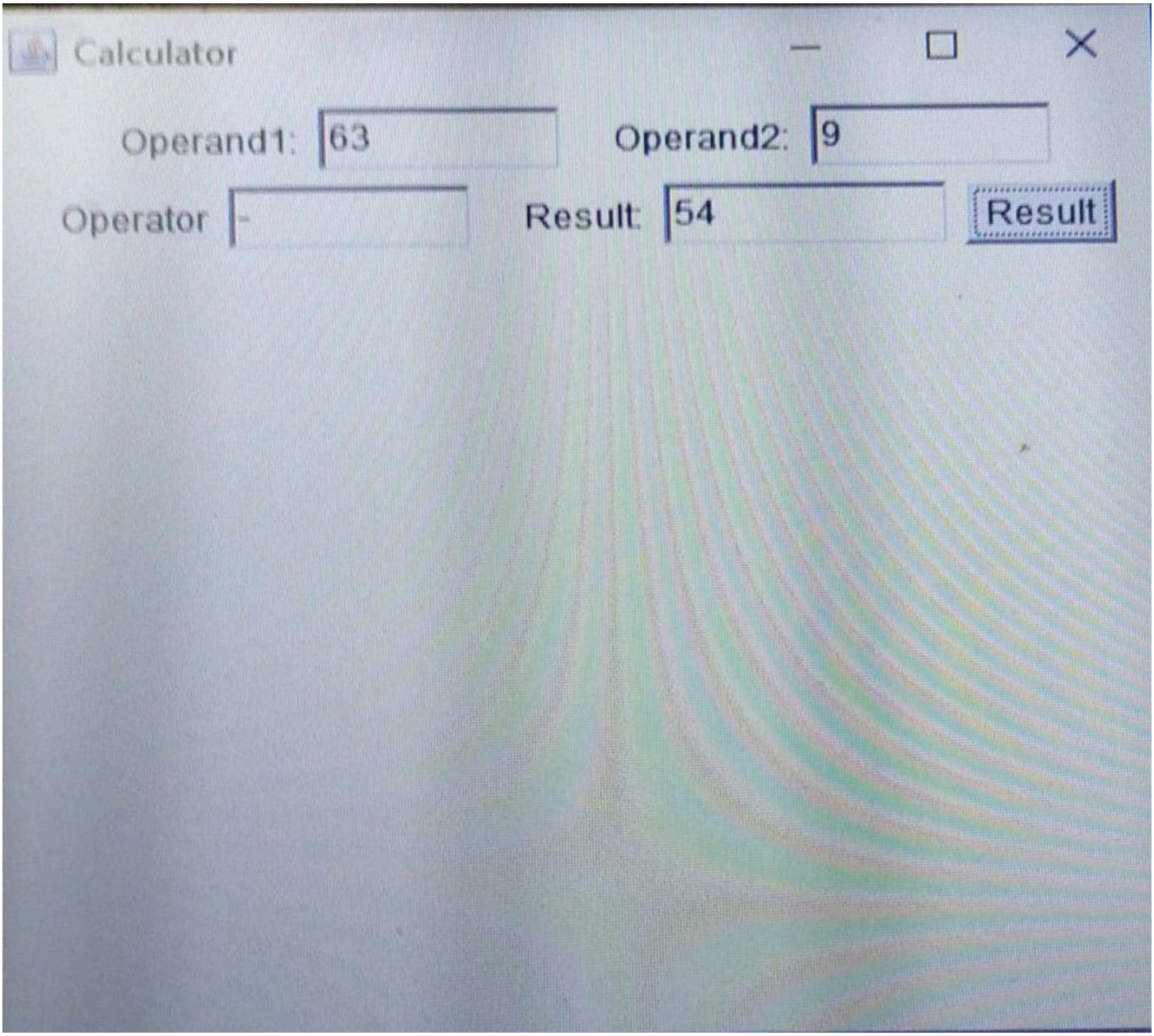
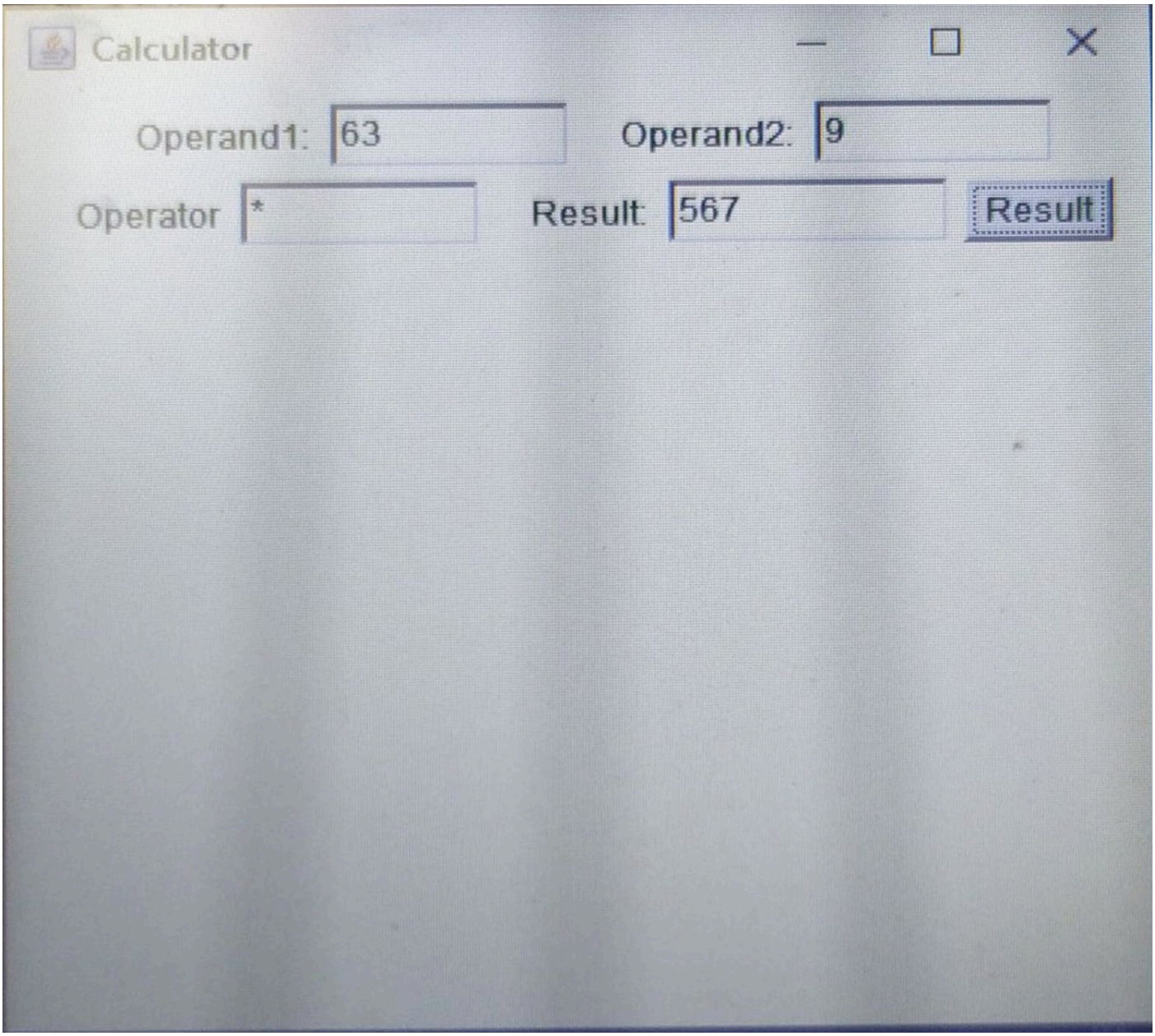
ButtonListD.java
lab10_updated.java
n2=Integer.parseInt(operand2.getText());
}
catch(NumberFormatException ne)
{
msg1="The input numbers should be integers";
return "";
}
switch (operator.getText()) {
case "+":
result = n1 + n2;
return String.valueOf(result);
case "-":
result = n1 - n2;
return String.valueOf(result);
case "*":
result = n1 * n2;
return String.valueOf(result);
case "/":
try {
result = n1 / n2;
return String.valueOf(result);
} catch (ArithmeticException e) {
msg1 = "Cannot divide operand1 by zero";
return "";
}
default:
msg1 = "Please input a valid operator";

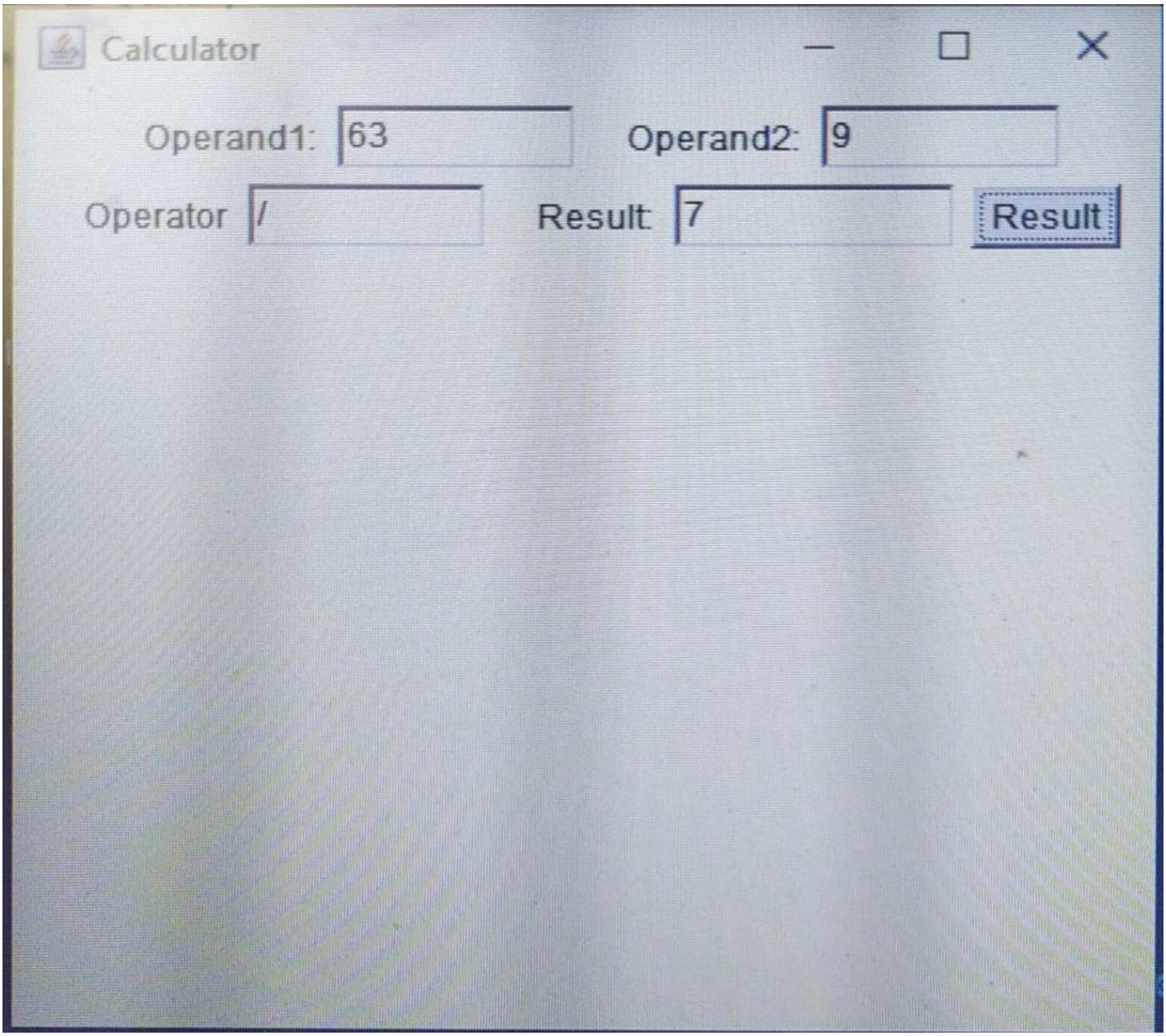


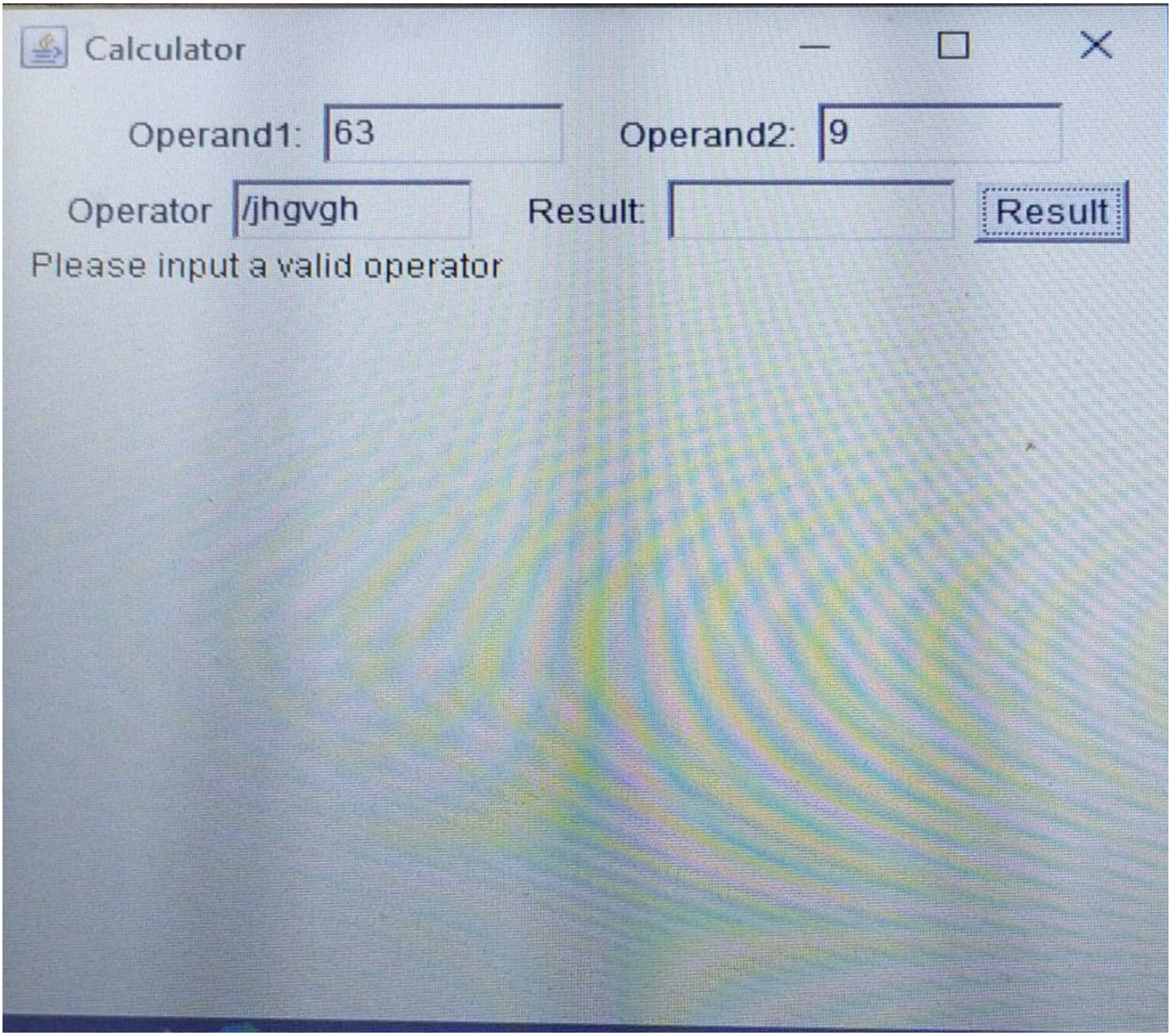
```
                try {
                    result = n1 / n2;
                    return String.valueOf(result);
                } catch (ArithmeticException e) {
                    msg1 = "Cannot divide operand1 by zero";
                    return "";
                }
            default:
                msg1 = "Please input a valid operator";
                return "";
        }
    }
    public void paint(Graphics g)
    {
        g.drawString(msg1, x: 20, y: 100);
        msg1="";
    }
    public static void main(String[] args)
    {
        week13_extra2 w1=new week13_extra2();
        w1.setSize( width: 400, height: 375);
        w1.setTitle("Calculator");
        w1.setVisible(true);
    }
}
```

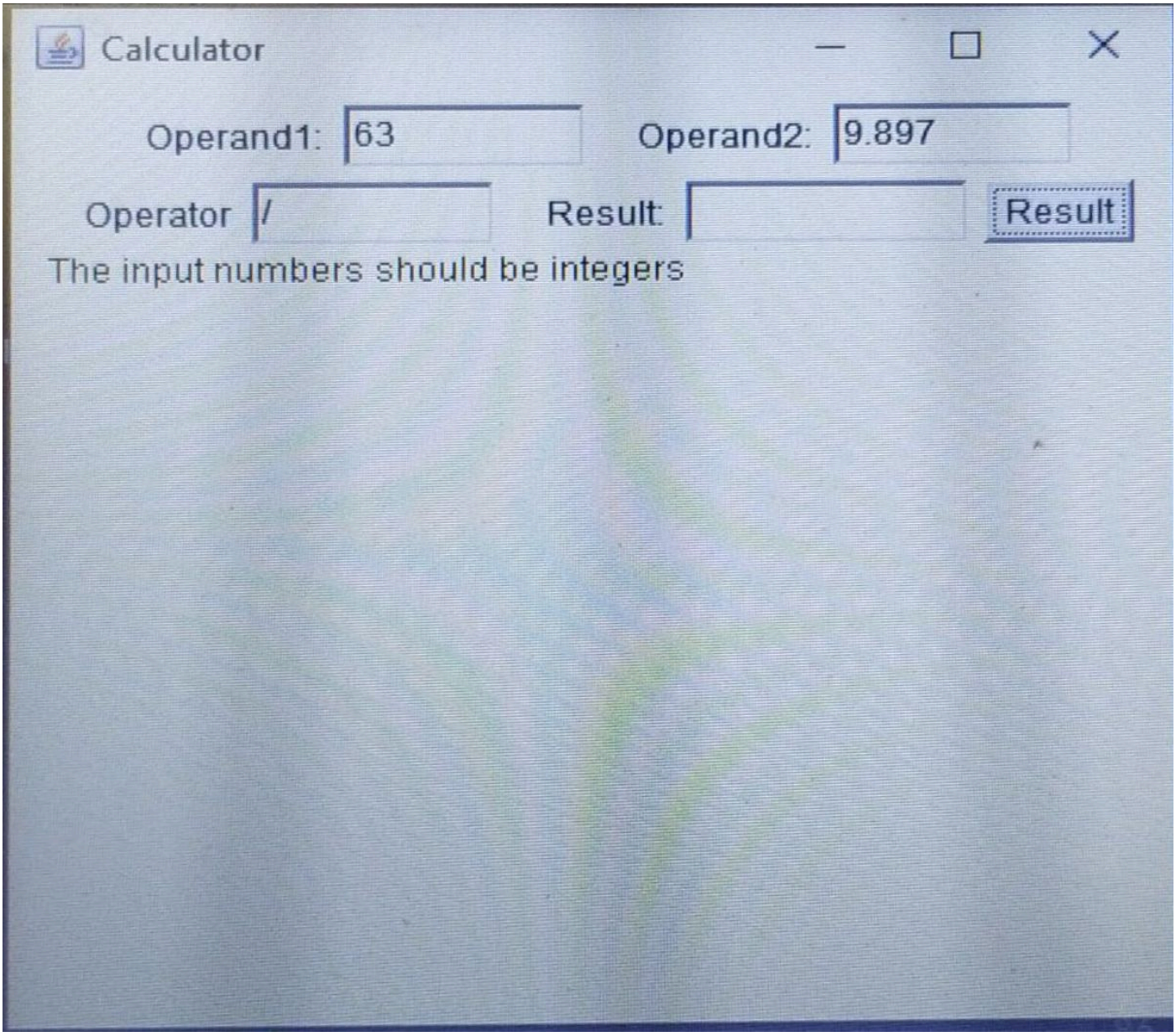

Calculator
Operand1: 63
Operand2: 9
Operator +
Result: 72
Result

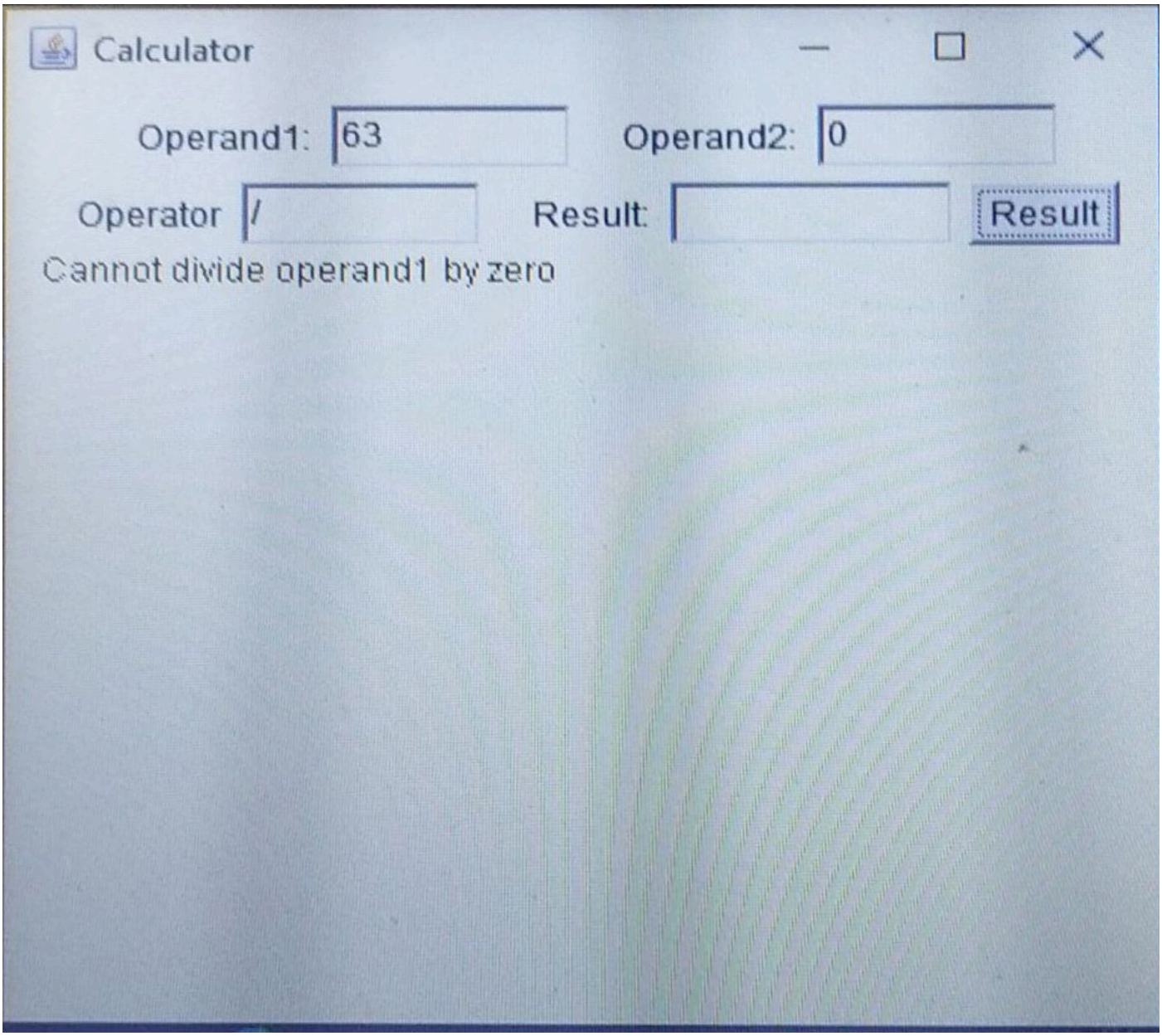

Calculator
Operand1: 63
Operand2: 9
Operator -
Result: 54
Result


Calculator
Operand1: 63
Operand2: 9
Operator *
Result: 567
Result


Calculator
Operand1: 63
Operand2: 9
Operator /
Result: 7
Result


Calculator
Operand1: 63
Operand2: 9
Operator /jhgvgh
Result:
Result
Please input a valid operator


Calculator
Operand1: 63
Operand2: 9.897
Operator /
Result:
Result
The input numbers should be integers


Calculator
Operand1: 63
Operand2: 0
Operator /
Result:
Result
Cannot divide operand1 by zero