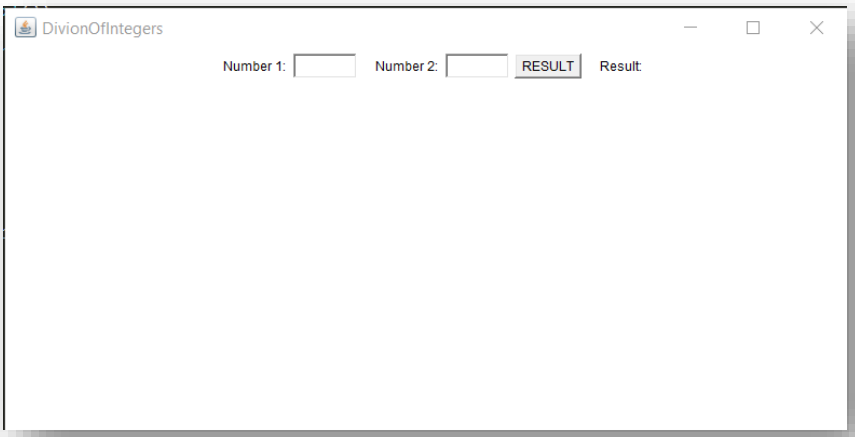
LAB Program : 10

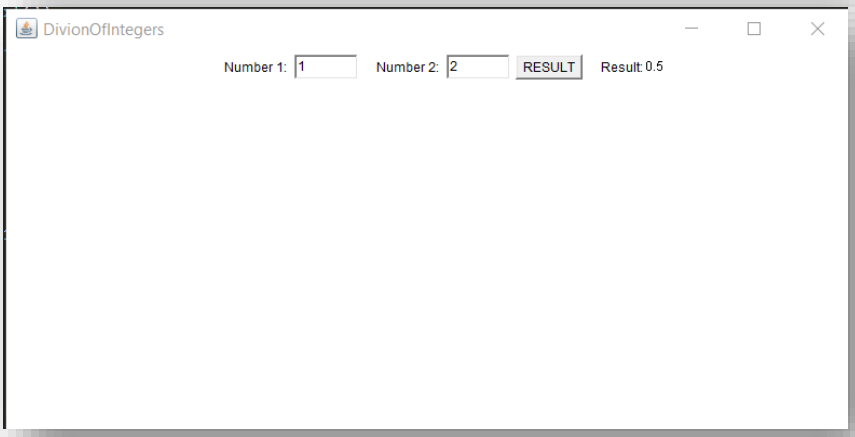
Code

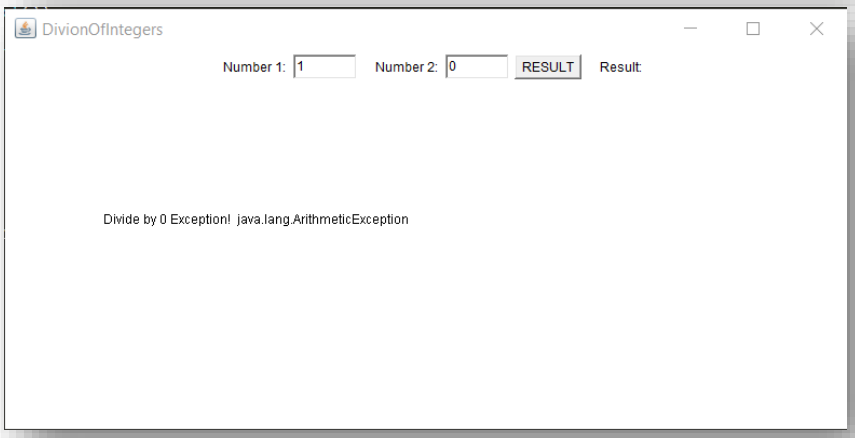
```
import java.awt.*;
import java.awt.event.*;

public class DivisionMain extends Frame implements ActionListener
{
    TextField num1,num2;
    Button dResult;
    Label outResult;
    String out="";
    double resultNum;
    int flag=0;

    public DivisionMain()
    {
        setLayout(new FlowLayout());

        dResult = new Button("RESULT");
        Label number1 = new Label("Number 1:",Label.RIGHT);
        Label number2 = new Label("Number 2:",Label.RIGHT);
        num1=new TextField(5);
        num2=new TextField(5);
        outResult = new Label("Result:",Label.RIGHT);

        add(number1);
        add(num1);
        add(number2);
        add(num2);
        add(dResult);
        add(outResult);

        num1.addActionListener(this);
        num2.addActionListener(this);
        dResult.addActionListener(this);
        addWindowListener(new WindowAdapter()
        {
            public void windowClosing(WindowEvent we)
            {
                System.exit(0);
            }
        });
    }

    public void actionPerformed(ActionEvent ae)
    {
        int n1,n2;
        try
```

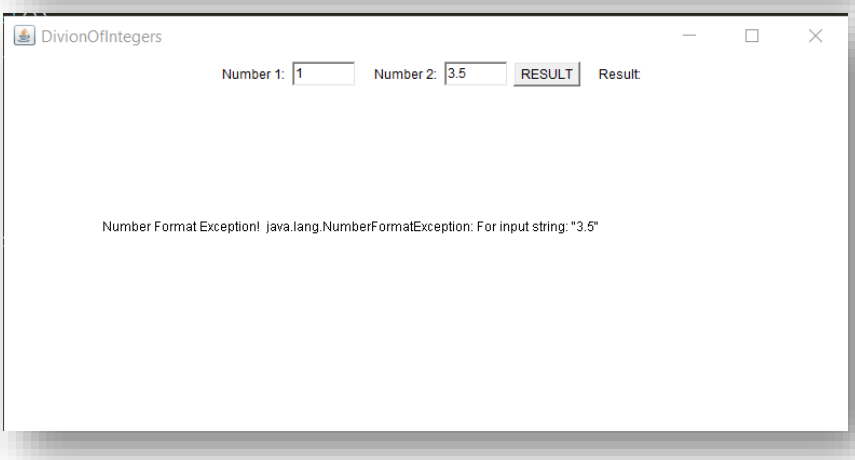
```
        try
        {
            if (ae.getSource() == dResult)
            {
                n1=Integer.parseInt(num1.getText());
                n2=Integer.parseInt(num2.getText());
                if(n2==0)
                    throw new ArithmeticException();
                resultNum=n1/(double)n2;
                out=String.valueOf(resultNum);
                repaint();
            }
        }
        catch(NumberFormatException e1)
        {
            flag=1;
            out="Number Format Exception!  "+e1;
            repaint();
        }
        catch(ArithmeticException e2)
        {
            flag=1;
            out="Divide by 0 Exception!  "+e2;
            repaint();
        }
    }

    public void paint(Graphics g)
    {
        if(flag==0)
        g.drawString(out,outResult.getX()+outResult.getWidth(),outResult.getY()+outResult.getHeight()-8);
        else
        g.drawString(out,100,200);
        flag=0;
    }

    public static void main(String[] args)
    {
        DivisionMain dm=new DivisionMain();
        dm.setSize(new Dimension(800,400));
        dm.setTitle("DivionOfIntegers");
        dm.setVisible(true);
    }

}
```

Output


DivionOfIntegers
Number 1:
Number 2:
RESULT
Result:


DivionOfIntegers
Number 1: 1
Number 2: 2
RESULT
Result: 0.5


DivionOfIntegers
Number 1: 1
Number 2: 0
RESULT
Result:
Divide by 0 Exception! java.lang.ArithmeticException


DivionOfIntegers
Number 1: 1
Number 2: 3.5
RESULT
Result:
Number Format Exception! java.lang.NumberFormatException: For input string: "3.5"