23.02.24

PROGRAM-9

Write a program that creates a user interface to perform integer divisions.

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
class SwingDemo{
    SwingDemo(){
    JFrame jfrm = new JFrame("Divider App");
    jfrm.setSize(275,150);
    jfrm.setLayout(new FlowLayout());
    jfrm.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    JLabel jlab = new JLabel("Enter the divider and
                                dividend:");

     JTextField ajtf = new JTextField(8);
     JtextField bjtf = new JtextField(8);
     JButton button = new JButton("Calculate");

     JLabel err = new JLabel();
     JLabel alab = new JLabel();
     JLabel blab = new JLabel();
     JLabel anslab = new JLabel();

     jfrm.add(err);
     jfrm.add(jlab);
     jfrm.add(ajtf);
     jfrm.add(bjtf);
     jfrm.add(button);
     jfrm.add(alab);
```

```
jfrm.add(blab);
jfrm.add(ansplab);

ActionListener l = new ActionListener() {
    public void actionPerformed(ActionEvent evt) {
        System.out.println("Action event from text field");
    }
};
atjf.addActionListener(l);
bjtf.addActionListener(l);
button.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent evt) {
        try {
            int a = Integer.parseInt(ajtf.getText());
            int b = Integer.parseInt(bjtf.getText());
            if(b==0)
                throw new ArithmeticException();
            int ans = a/b;
            alab.setText("In A = " + a);
            blab.setText("In B = " + b);
            anslab.settext("In Ans = " + ans);
            err.setText("");
        }
        catch (NumberFormatException e) {
            alab.setText("");
            blab.settext("");
            anslab.settext("");
            err.settext("Enter Only Integers!");
```

```
        }
        catch (ArithmeticException e) {
            alab.setText("");
            blab.setText("");
            anslab.setText("");
            err.setText("B should be NON zero!");
        }
    }
});
frame.setVisible(true);
}
public static void main(String args[]) {
    SwingUtilities.invokeLater(new Runnable() {
        public void run() {
            new SwingDemo();
        }
    });
}
```

Output:

enter the dividend and divisor:

A= 10

B= 2

Ans= 5

Divider app

Enter only Integers!

Enter the divider and dividend:

10 a

Calculate

Hamsika [1BM22CS054]

Divider app

B should be NON zero!

Enter the divider and dividend: 10

0

Calculate

Arugunta Hamsika [1BM22CS054]

Enter the divider and dividend:

10 1

Calculate A= 10 B= 1

Ans= 10 hamsika [1BM22CS054]