JAVA LAB PROGRAM-9

Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the text fields, Num1 and Num2. The division of Num1 and Num2 is displayed in the Result field when the Divide button is clicked. If Num1 or Num2 were not an integer, the program would throw a NumberFormatException. If Num2 were Zero, the program would throw an Arithmetic Exception Display the exception in a message dialog box.

Code:

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
class SwingDemo {
 SwingDemo() {
 JFrame jfrm = new JFrame("Divider App");
 jfrm.setSize(300, 250);
 jfrm.setLayout(new FlowLayout());
 jfrm.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
 JLabel nameLabel = new JLabel("Name: Akshay S, USN: 1BM23CS022");
 JLabel jlab = new JLabel("Enter the divisor 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(nameLabel);
 jfrm.add(jlab);
 jfrm.add(ajtf);
 jfrm.add(bjtf);
 jfrm.add(button);
```

```
jfrm.add(alab);
jfrm.add(blab);
jfrm.add(anslab);
jfrm.add(err);
button.addActionListener(new ActionListener() {
public void actionPerformed(ActionEvent evt) {
try {
int a = Integer.parseInt(ajtf.getText());
int b = Integer.parseInt(bjtf.getText());
int ans = a / b;
alab.setText("A = " + a);
blab.setText("B = " + b);
anslab.setText("Result: " + ans);
err.setText("");
} catch (NumberFormatException e) {
alab.setText("");
blab.setText("");
anslab.setText("");
err.setText("Error: Please enter valid integers!");
} catch (ArithmeticException e) {
alab.setText("");
blab.setText("");
anslab.setText("");
err.setText("Error: B should be NON zero!");
}
}
});
jfrm.setVisible(true);
}
public static void main(String args[]) {
```

```
SwingUtilities.invokeLater(new Runnable() {
public void run() {
new SwingDemo();
}
});
}
}
```

Output: