

LAB - 9

WAP that creates a user interface to perform Integer divisions. The user enters two numbers in the text fields, num1 & num2. The division of Num1 & Num2 is displayed in Result field when the divide is if Num1 & Num2 were not an integer, the program would throw an arithmetic exception display the message dialog box.

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

```
class SwingDemo {
```

```
    SwingDemo() {
```

```
        JFrame jfm = new JFrame("Divide App");
        jfm.setSize(275, 180);
        jfm.setLayout(new FlowLayout());
        jfm.setDefaultCloseOperation(JFrame.EXIT
                                     ON_CLOSE);
```

```
        JLabel jlab = new JLabel("Enter the Dividend
                                   and dividend");
```

```
        JTextField a1tf = new JTextField(8);
```

```
        JTextField b1tf = new JTextField(8);
```

```
        JLabel cu = new JLabel();
```

```
        JLabel alab = new JLabel();
```

```
        jfm.add(cu);
```

```
        jfm.add(jlab);
```

```
        jfm.add(a1tf);
```



```

ActionListener l = new ActionListener()
{
    public void actionPerformed(ActionEvent e)
    {
        System.out.println("Action Event from a text");
    }
};

```

```

ajtf.addActionListener(l);
bjtf.addActionListener(l);

```

```

buttonActionListener(new ActionListener) {
    public void actionPerformed
    {
        try {
            int a = Integer.parseInt(ajtf.getText());
            int b = Integer.parseInt(bjtf.getText());
            alab.setText("\n A = " + a);
            blab.setText("\n B = " + b);
        } catch (NumberFormatException c) {
            alab.setText(" ");
            blab.setText(" ");
            anslab.setText("");
        } catch (ArithmeticException e) {
            alab.setText(" ");
            blab.setText(" ");
            crl.setText("B should be Non zero");
        }
    }
};

```

```

gfm.setVisible(true);
}

```



```
public static void main (String args[])
{
```

```
    SwingUtilities.invokeLater (new Runnable()
    {
```

```
        public void run() {
            new SwingDemo();
        }
    }
}
```

OUTPUT:

Enter the dividee and dividend

10

2

Calculate A=10 B=2 Ans=5

Shamanth K Murthy

IBM22CS251

Functions

JFrame :- The `java.awt.Swing.JFrame` class is a type of container which inherits the `java.awt.Container`. JFrame works like the main window where components like labels, text fields are added.

setSize (int width, int height) - used to resize a frame using width & height parameters.

setLayout() - method allows you to the layout of the container. The layout manager helps layout the components held by this container.

setDefaultCloseOperation() - method is used to specify one of several options for the close button JFrame. EXIT_ON_CLOSE

JLabel - The object of JLabel classes is a component for placing text in a container. It is used to display a single line of read only text.

JTextField - The object of a JTextField class is a text component that allows the editions of a single line text. It inherits JTextComponent class.

add(frame) - adds new frame to the existing frames.

Action Listener - The Java ActionListener is notified whenever you click on the button or menu item. It is notified against ActionEvent.

setText() - This method substitutes new text for all or part of the text in the text field.

setVisible() is a method that has return type boolean.

23/2/2024