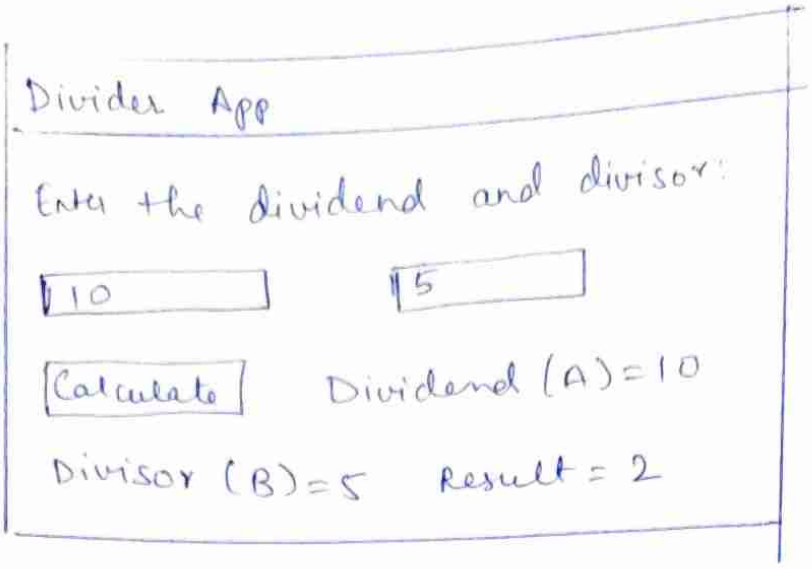
9. Applets - 20-02-2024

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

class SwingDemo
{
 SwingDemo()
  {
  JFrame jfrm = new JFrame ("Divider App");
  jfrm.setSize (275, 200);
  jfrm.setLayout (new FlowLayout ());
  jfrm.setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);

  JLabel jlab=new JLabel ("Enter the dairidend and
                                    divisor 4);
  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 (jlab);
jfrm.add (ajtf);
jfrm.add (bjtf);
jfrm.add (button);
```

```
jfrm.add(err);
jfrm.add(alab);
jfrm.add(blab);
jfrm.add(anslab);

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("B should be
                                    non zero!");
    }
   int ans = a/b;
  alab.setText("\n Dividend (A) = "+a);
  blab.setText("\n Divisor (B) = "+b);
  anslab.setText("\n Result = "+ans);
  err.setText(" ");
 } catch (NumberFormatException e)
 {
   err.setText("Enter only integers!");
   alab.setText("");
```

```
alab.setText("");
anslab.setText("");

}
catch(ArithmeticException e)
{
err.setText("B should be non zero");
alab.setText("");
blab.setText("");
anslab.setText("");
}

}
});
jfrm.setVisible(true);

}

public static void main(String args[])
{
SwingUtilities.invokeLater(new Runnable()
{
public void run()
{
new SwingDemo();
}
});
}
}
```

Output:



Functions used:

1. void setSize(int width, int height) – Sets the size of the component.
2. void setLayout(LayoutManager mgr) - Sets the layout manager for the JFrame.
3. ~~void~~ setDefaultCloseOperation(int operation) - Sets defau close operation for the JFrame.
4. void addActionListener(ActionListener listener) - Adds an action listener to the JButton
5. Void setText(String text): Sets the text of a JLabel or a JTextField.
6. void InvokeLater(Runnable doRun): Causes the Runnab to be executed asynchronously on the AWT event dispatching thread.
7. setVisible(boolean visible): Sets the visibility of the JFrame

8. void run() - Method executed by Runnable interface which in this case initializes the SwingDemo object.

20/2/24