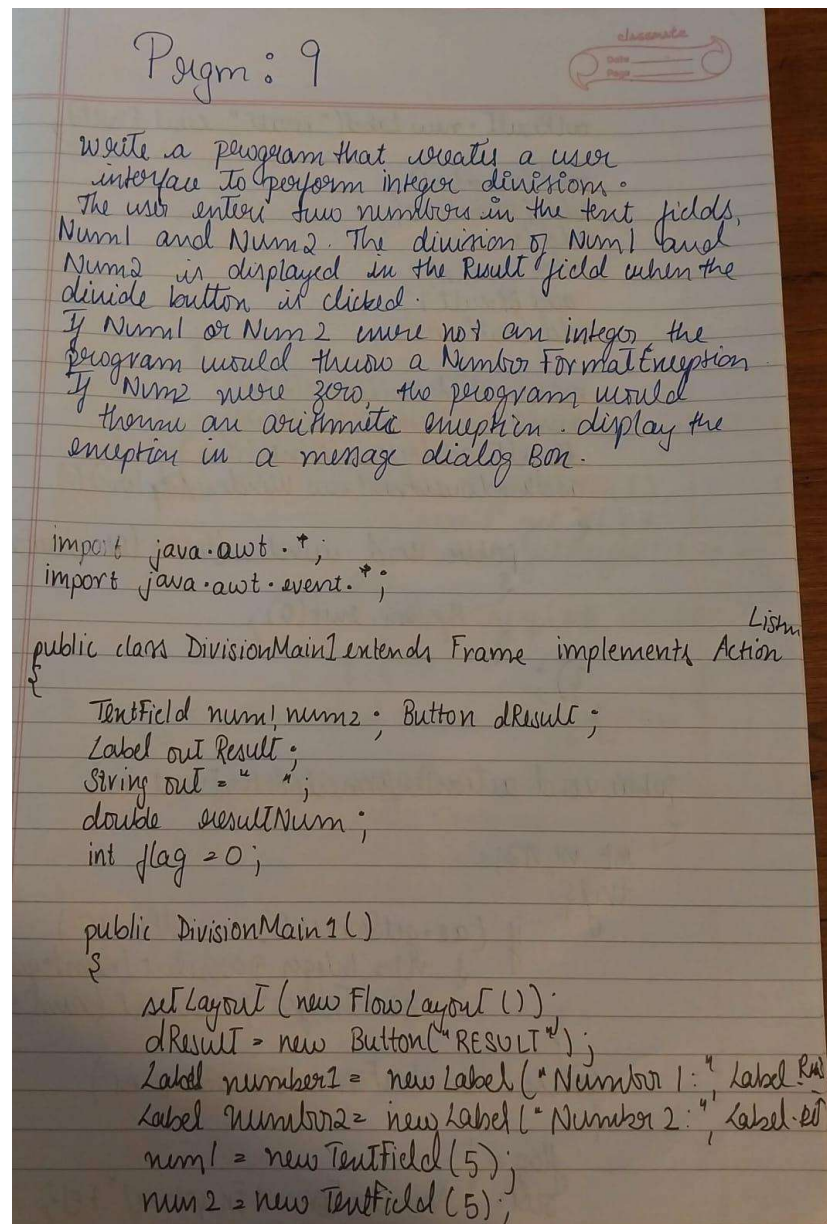


Week 9

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.



```
outResult = new Label("Result", label.Right);
```

```
add(num1);  
add(num2);  
add(num1);  
add(num2);  
add(dResult);  
add(outResult);
```

```
num1.addActionListener(this);  
num2.addActionListener(this);  
dResult.addActionListener(this);  
addWindowListener(new WindowAdapter() {
```

```
{  
    public void windowClosing(WindowEvent e)  
    {  
        System.exit(0);  
    }  
});
```

```
public void actionPerformed(ActionEvent ae)  
{
```

```
    int n1, n2;
```

```
    try {
```

```
        if (ae.getSource() == dResult)
```

```
        {  
            n1 = Integer.parseInt(num1.getText());  
            n2 = Integer.parseInt(num2.getText());
```

```
        }  
        catch (NumberFormatException e1)
```

```
        {  
            flag = 1;
```

```
            out = "NumberFormatException" + e1;
```



```

        } repaint();
    } flag = 1;
    but = "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)
{

```

```

    DivisionMain1 dm = new DivisionMain1();
    dm.setSize (new Dimension (800, 400));
    dm.setTitle ("Division Of Integers");
    dm.setVisible (true);
}

```

```

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

public class DivisionMain1 extends Frame implements ActionListener
{
    TextField
    num1,num2; Button
    dResult;
    Label
    outResult;
    String out="";
    double
    resultNum; int
    flag=0;

    public DivisionMain1()
    {
        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()

```

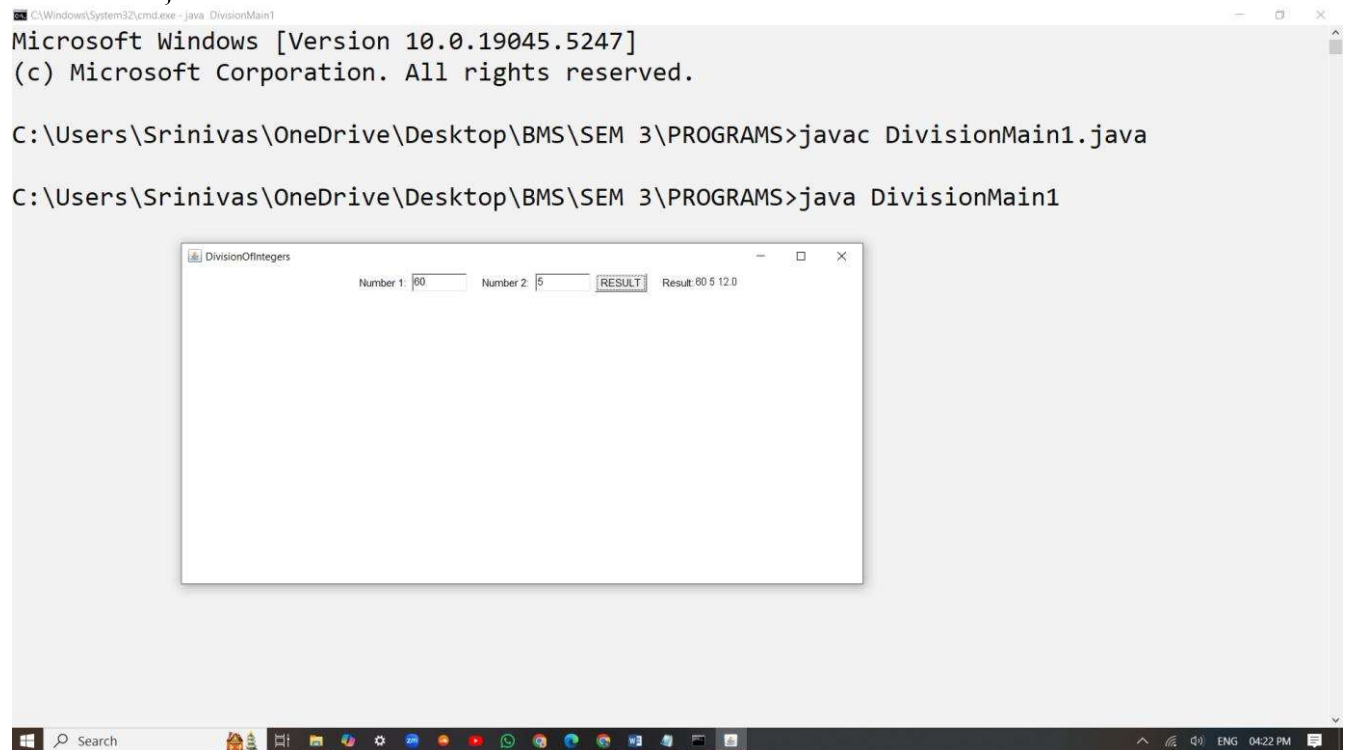
```

        {
            public void windowClosing(WindowEvent we)
            {
                System.exit(0);
            }
        });
    }
    public void actionPerformed(ActionEvent ae)
    {
        int n1,n2;
        try
        {
            if (ae.getSource() == dResult)
            {
                n1=Integer.parseInt(num1.getText());
                n2=Integer.parseInt(num2.getText());

                /*if(n2==0)
                    throw new ArithmeticException();*/
                out=n1+" "+n2+" ";
                resultNum=n1/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;  
}
```



C:\Windows\System32\cmd.exe - java DivisionMain1

Microsoft Windows [Version 10.0.19045.5247]
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C:\Users\Srinivas\OneDrive\Desktop\BMS\SEM 3\PROGRAMS>javac DivisionMain1.java

C:\Users\Srinivas\OneDrive\Desktop\BMS\SEM 3\PROGRAMS>java DivisionMain1



C:\Windows\System32\cmd.exe - java DivisionMain1

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