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Lab 10

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Write a Program that creates a user Interface to Perform Integer division. The user enters two numbers in the text. The division of num1 & num2 is displayed in result field when the divide is divided if num1 or num2 were not an Integer the Program would throw an Arithmetic exception in a message

```
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: ");

        JButton button = new JButton("Calculate");
        JLabel err = new JLabel("");
        JLabel alab = new JLabel("");
        JLabel blab = new JLabel("");
        JLabel anlab = new JLabel("");
```

```
frm.add(err);
frm.add(jlab);
frm.add(ajtf);
frm.add(bjtf);
frm.add(button);
frm.add(alab);
frm.add(blab);
frm.add(anlab);

ActionListner L = new ActionListner()
{
  Public void actionPerformed(ActionEvent evt)
  {
    System.out.println("Action event from a text field");
  }
};
ajtf.addActionListener(L);
bjtf.addActionListner(L);

button.ActionListner(new ActionListner()
{
  Public void actionPerformed(Action Event evt)
  {
  try{
    int a = Integer.ParseInt(ajtf.getText());
    int b = Integer.parseInt(bjtf.getText());
    int ans = a/b;
    alab.setText("In A=" +a);
    blab.setText("In B=" +b);
  }
```

```
catch (number from at Exception e)
{
    alab.setText(" ");
    blab.setText(" ");
    ans lab = setText(" ");
        Text ("Enter only Integer!");
}
catch (ArithmaticException e) {
    alab.setText(" ");
    blab.setText(" ");
    anslab.setText(" ");
    err.setText("B should be Non zero");
}
});
frm setVisible(true));
}
Public static void main(String Args[])
    Swing Utilities.invokeLater(new Runnable()
    {
        Public void run()
            new SwingDemo();
    }
});
}
```

Output

Enter the dividen and divisor

10 2

Calculate A=10 B=2 Ans=5

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Function

JFrame :- The Java x Swing JFrame class is a type of container which inherits the java.awt.Frame class. JFrame works like the main window

setSize(int width, int height) - used to size a frame using width and height parameters

setLayout() :- methods allow you to set the layout of the container. The layout manager's help : lay out the components by this container

setDefaultCloseOperation() - methods used to specify one of several options for the close button
JFrame.EXIT_ON_CLOSE - Exit application

JTextField - the object of a JTextField class is a text components that allow the editions of a single line text It inherits JText Component class

add(Frame) - adds new frame to the existing

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setText() - This method substitutes new text has all or part of the text field. This works only with the first line of multi-line text field.

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

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