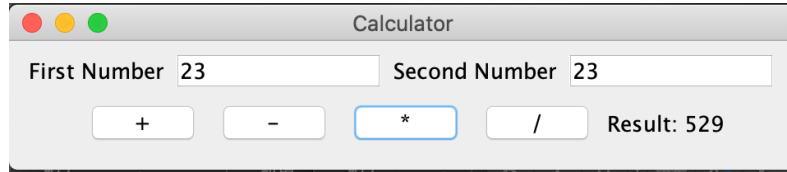


Lab 18

Create a new Eclipse project named **YourStudentId_Lab18** and create a class “Calculator”. (Only one class is needed)

Please follow the instructions to create a calculator and it should look like this:



Calculator	
Extends from JFrame	
Modifier and type	Method (or Variable) and description
Constant variable	
int	FRAME_WIDTH The width of the frame. 400
int	FRAME_HEIGHT The height of the frame. 100
int	FIELD_WIDTH The width of the TextField. 10
Instance variable	
JLabel	firstNumLabel, secondNumLabel, resultLabel
TextField	firstNumField, secondNumField
Constructor and Description	
Calculator() Constructs a Calculator. Set the frame size by constant variables, FRAME_WIDTH and FRAME_HEIGHT. And then call all help methods to create a GUI.	
JButton	createOperatorButton(...) Instantiates a button for the operation, and once the button is clicked it can perform these jobs: <ol style="list-style-type: none"> Get the value of two text field. Pass the two number and the operator to the method “doCalculate”. Update JLabel “result” to show the result. Exception handling: <ol style="list-style-type: none"> If any value of textfield can’t parse to integer, show as following: <div data-bbox="461 1440 1201 1598" data-label="Image"> </div> If there is any number divided by zero, show as following: <div data-bbox="461 1638 1185 1795" data-label="Image"> </div>
int	doCalculate(int num1, int num2, String operator) throws ... <ol style="list-style-type: none"> Do the arithmetic and return the result.

```
//main method
public static void main(String[] args) {
    // TODO Auto-generated method stub
    JFrame frame = new Calculator();
    frame.setTitle("GUICalculator");
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.setVisible(true);
}
```

Submission: Submit your project as “zip (or rar) file” via WM5. No other submissions will be graded.

Reminder: Please zip **the whole project**.

Deadline: Tomorrow’s midnight (for both Mon56 and Tue23)