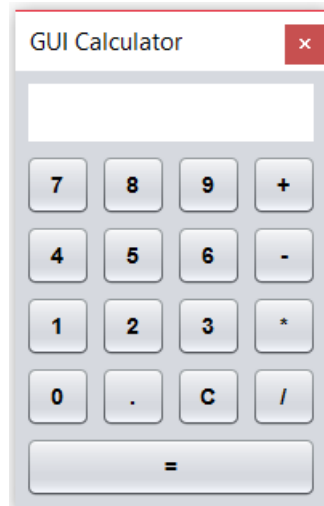


javax.swing and java.awt – Java Graphical User Interface

- 1) Create a new NetBeans Java Project and right-click to add a new **JFrame Form**. This will create a graphical user interface class which you can name it **CalculatorUI.java**. Using the components provided by the **javax.swing** library design a Graphical-Based User Calculator similar to the picture below. You may use **JButtons** and **JTextField** from the NetBeans Palette on the right. From there you may also view some important properties of the components.



- 2) Then using the **java.awt.event** library add the functionalities of the Java-based Calculator. The listeners are automatically created by double-clicking on the components in NetBeans. A sample of functionalities may include:
 - a) When a button with a number is clicked, it will display the value in the text field
 - b) When a button with an arithmetic operation is clicked, it will perform the operation between two or more numbers.
 - c) When the equal button is clicked, it will display the result of the corresponding operation.
 - d) When the clear button is clicked, it will erase anything currently displayed in the text field.