**For the Graph GUI class, we have public methods of the constructor Graph\_GUI(), the initiation function init(); actionPerformed( ActionEvent e) shows how the program reacts to the operations done by the user (like selecting a radio button or pressed a button) , and it will also call functions to handle with data and draw the graph; getMenu() will set the menu and menubar; public class MenuListener which make us be able to react to the operation on menu.**

getMenu

init

Graph\_GUI

MenuListener

actionPerformed

Object

Draw

Calculate

Create Object

Call init()

React to opreations

Click calculate

Click Draw

Call getMenu()

React to opreations

**Graph\_GUI: (extends Jframe and implements ActionListener and AdjustmentListener)  
Holding private elements for GUI.  
Setting the basic setup of the GUI window.  
Calling init function.**

**init:  
Calling getMenu function, and set the return result as the menubar.****Setting up all buttons’ colors, names, positions, font, and add actionListener to them.  
Setting the input and output textfield on the GUI.  
Placing all buttons and textfield on GUI.**

**getMenu:  
Setting up all options’ colors, names, font, and add actionListener to them.**

**MenuListener:(implements ActionListener)  
Setting what should be done when “exit”, “save”, “open” operation are clicked.**

**actionPerformed:  
Getting the input from textfield and buttons.  
Calling corresponding functions or methods.**