

I. Create a window and draw the diagonals of the window in it, use the *java.awt* library.

Take a look at the *paintComponent* method and the specifics of the *drawLine* method.

II. Write a program that will simulate a simple text editor. In the *JFrame* window, place the *JTextArea* component and create a simple method that will determine its characteristic values according to the arguments passed to it:

- Background color
- Font color
- Font type (np. Dialog)
- Font size (np. 14)
- Font emphasis (np. bold)

III. The task aims to familiarize you with the basic layout manager of graphic components. Write a program that will test basic layouts.

The window should contain 5 buttons (*JButton*) containing the following subtitles:

- „Button1”
- „Button 2”
- „B3”
- „B 4”
- „Big button with a number 5”

You need to implement 3 basic layouts with their sample options:

- *BorderLayout*
- *FlowLayout* left aligned
- *FlowLayout* right aligned
- *FlowLayout*
- *GridLayout* – as a single row
- *GridLayout* – as one column
- *GridLayout* – as a table, 2 columns, 3 rows

At the beginning of the program, we should choose which layout we want to use. Then the components should be displayed according to the selected layout.