

Homework 1

Instructions: Please complete the following in one VI. Refer to the Front Panel screen shot on the second page of this document for further guidance. If you have questions, please post comments on the homework on your university's LabVIEW Workshop website.

1. Include your first and last name, and 'Homework 1' in a comment box (double click on blank space on the front panel to create a comment box).
2. Perform this calculation in LabVIEW: $(A + B) * (C - 1)$
 - a. On the front panel, create numeric controls for A, B, and C.
 - b. Make sure the controls are labeled A, B, and C.
 - c. Display the answer using a Vertical Pointer Slide Indicator.
 - d. Make the label for the indicator invisible.
 - e. Make sure all the numeric controls are aligned and equally spaced.
3. Pass a word from a string control to a string indicator.
 - a. The label for the string control should be left as 'String'. The label for the string indicator should be 'LabVIEW is:'
 - b. The font for the string control and string control label should be 18pt, bold, and red.
 - c. The font for the string indicator should be 24pt, italic, and blue. The label's font should not be changed.
4. Turn 2 LEDs on using push buttons.
 - a. Create two push buttons which each correspond to an LED
5. Make sure the block diagram is neat.
6. Enter values into the controls and press run to make sure the program works
7. Also try running continuously

CLAD Component

1. Change the mechanical actions of the push buttons created in part 4:
 - a. One push button's mechanical action should be 'Switch when released'
 - b. The other push button's mechanical action should be 'Latch until released'
2. Save the VI to a folder called Lastname_Firstname_HW1. Create a new project. Save it in the folder you just created as Lastname_Firstname_Project1. Add the homework 1 VI to the project and save again. Submit the entire folder as your homework.

Bonuses:

- Create a while loop with a stop button around all the components in the block diagram so that it will continuously run without having to press the run continuously button.
- If you have LabVIEW 2011, use the silver palette.

