

LAB 2

Section 2

Mar. 1, 2016

Suppose that you have sticks of two colors (red and blue), and you want to place as many sticks as possible over a line of known length.

All red sticks have the same length. Similarly all blue sticks have the same length. The length of a red stick may be different than that of a blue one.

You want to ensure that both of **the first and the last sticks are red**, and consecutive sticks always alternate in color. The length of the gaps in both ends must be equal.

For example, the following is a correct sequence:



Write an interactive program that prompts and reads;

1. The length of a red stick,
2. The length of a blue stick,
3. The length of the line to be covered.

The program should display the **number of red and blue sticks** and the **length of the gap**.

Here is a sample run. User input is in red color.

```
Please enter the length of a red stick: 7
Please enter the length of a blue stick: 5.5
Please enter the length of the line: 50
Number of blue sticks : 3
Number of red sticks  : 4
The gap at each end   : 2.75
```

After finishing your work, select your folder (e.g. Lab02), then right click and select "Send to" option. Click "Compressed (zipped) folder". Rename your zip file as "Lab02_Surname_Name". Note that, your file type is "zip", namely your file name will not be "Lab02_Surname_Name.zip". Upload your zip file to Unilica. Note that you must upload your file before 11:40; you cannot upload your file after that time.