

Lab02

BINARY DIVISOR

Your job:

Write a program in LC-3 machine language with a hex editor (like xxd, wxHexEditor, 010Editor etc.), in order to perform a 1-bit arithmetic right shift on the given value.

Details:

- A 16-bits signed integer input value will be given in R0 register. And the output value must also go there.
- Your program will be loaded and executed from x3000.
- The last instruction executed should be HALT.
- R7 register should remain the same after the execution.

Examples:

	Before Execution	After Execution
R0	x8a9c	xc54e
R7	x6666	x6666

Requirements:

The report shall contain at least 3 parts: How do you work out the algorithm? How do you write the program? And how do you design your own test cases to ensure the program works fine?

Submit your program:

The program you submit to our server is the **.asm** file and **.pdf** report.

Save your .asm file, and give it the name **ID_Name_Lab02.asm**.

Give your report the name **ID_Name_Lab02.pdf**.

Your scores:

Correctness 60%

Report 30%

Great ideas 10%