CS154 Computer Architecture
Winter Term 2018

Lab Assignment 02

- Download and install SPIM for the operating system of your computer:
  `http://spimsimulator.sourceforge.net`
- Learn the properties of SPIM and how to use it from the web site.

- MIPS has single and double-precision floating-point instructions for adding, subtracting and multiplying and dividing. The purpose of this lab is however to develop the function `MYADD` that performs addition of two single-precision operands, written completely in assembly language using **integer** instructions.

- Make space in the data segment of the your program for 3 words to place the single-precision floating-point number operands A, B, and C. Your function `MYADD` will perform the operation $C = A + B$ and place it in C.

- Test your programs using the following inputs. First convert these numbers to the floating-point on paper:

$$C = A + B = 12.5 + 3.5 = 16.0$$
$$C = A + B = 2.25 + (-4.25) = -2.0$$

  Then, perform your functions on SPIM with these operands, and check to see if they are correct. You can test your function using other input values, but make sure it works at least for the one above. Your function assumes that A and B are given, and computes C.

- To simplify the development, *you may ignore rounding operation* in your function. Just perform truncation operation in your program whenever it would be needed.