Computer Architecture
Spring 2017

Homework No. 4
(Due on April 12)

(When you run the SPIM simulator, you need to capture the window showing the simulation result and submit it.)

1. a) For the code in the lecture note p. 48 on non-leaf procedure, assume that n = 3, $sp = 500, and the MIPS code is loaded starting from memory 200 (the address of 'addi $sp $sp −8). Run the code by hand, and show the result of every instruction line by line.
   b) Run the code using SPIM, and verify if your hand computation is correct. Show how many steps are taken to run the code, and the window showing correct answer. (30)

2. For the code in the lecture note p. 54 on string copy, assume that address of x and y are 100 and 200, respectively, and i = 10 and sp = 500. Run the code using SPIM, and show the window showing correct answer. (20)