This week, please still try to make sure that every student is able to run SPIM and knows how to debug with it. In there are additional time, please ask them to write a complete program in which two floating point arrays, arry0 and arry1 are given, each with 5 elements. The student is asked to declare another floating point array arry2, in which arry2[i] is set to be the minimum of arry0[i] and arry1[i].

My code is below:

.data

arry0: .float 0.6, 0.7, 0.9, 0.1, -0.8

arry1: .float 0.8, 1.9, 11.2, -0.19, 0.7

arry2: .space 20

 .text

 .globl main

main:

 la $a0, arry0

 la $a1, arry1

 la $a2, arry2

 li $a3, 5

 jal floatArray

done:

 addi $t0, $a2, 0

 addi $t1, $0, 0

loop:

 li $v0, 2

 l.s $f12, 0($t0)

 syscall

 li $v0, 4

 la $a0, msg\_newline

 syscall

 addi $t0, $t0, 4

 addi $t1, $t1, 1

 blt $t1, $a3, loop

exit:

 li $v0,10

 syscall

floatArray:

 addi $sp, $sp, -12

 swc1 $f0, 8($sp)

 swc1 $f1, 4($sp)

 swc1 $f2, 0($sp)

 addi $t0, $a0, 0

 addi $t1, $a1, 0

 addi $t2, $a2, 0

 addi $t9, $0, 0

floatArrayloop:

 l.s $f0, 0($t0)

 l.s $f1, 0($t1)

 c.lt.s $f0, $f1

 bc1t floatArrayskip

 mov.s $f0, $f1

floatArrayskip:

 s.s $f0, 0($t2)

 addi $t0, $t0, 4

 addi $t1, $t1, 4

 addi $t2, $t2, 4

 addi $t9, $t9, 1

 blt $t9, $a3, floatArrayloop

 lwc1 $f0, 8($sp)

 lwc1 $f1, 4($sp)

 lwc1 $f2, 0($sp)

 addi $sp, $sp, 12

 jr $ra