

Computer Organization and Assembly Languages

Spring 2022

Homework #3

On MARS, write a MIPS assembly program that sorts a sequence of positive integers entered from the console (one number in one line). The end of the sequence is indicated by a 0 (zero). Verify that the program is correct by simulation. You can use any sorting algorithm in your code except bubble sort, such as selection sort, merge sort, quick sort, etc. However, there must be a procedure call as well as looping in your code. Print out the output in ascending order on the console also, with a space between neighboring numbers. Describe your sorting algorithm in the beginning of the text file as comments. The file should be named as *studentid-hw3.s*.

Submit the text file with programs to e-learning by the due day.

Notes : Do your homework on your own. You could have discussion with your classmates, but no copying is allowed.