

National Sun Yat-Sen University
ASSEMBLY LANGUAGE AND MICROCOMPUTER
Program #1
Due 11:59 PM Oct 25 2022

<**Programming Problem I**> Write an ARM assembly code to implement a sorting function which can print out the sorted result for the given input series of integer numbers. For example, when you execute the sorting program as follows:

arm-none-eabi-run sort 20 11 23 51 23 37 6

Then the screen should show the following results:

Sorting result is : 51 37 23 23 20 11 6

The maximum length of the series is 8. The value of integer will be between 0 and 999.

You can use *printf()* function to print the result, but are not allowed to use *scanf()* function. Therefore, you have to convert the input arguments from the string type to the actual integer number.

Note:

- (a) Your assembly code should follow the APCS rules described in the textbook.
- (b) The submission of your homework should follow the method announced by TA before the deadline. Homework submitted after the deadline will not receive any score.