

Assignment 3

CS270 Spring 2017

Due March 10, 2017

Simple MIPS Program

Write a MIPS program that reads in (from standard input) an array of values, prints (to standard output) the array backwards, and prints the largest element in the array. Your code should do this efficiently (using only two loops) and points will be deducted for inefficient solutions. The program's output should match the sample output shown below **EXACTLY**, and store the values in an array that is declared as part of the static data segment of your program. The input will be the number of values in the array followed by each of those values. You can assume that the size of the array will be a nonnegative number less than 100, and that each value of the array will fit in an integer.

Example input:

```
5
0
1
3
2
5
```

Expected output for the above input:

```
The array in reverse is: 5, 2, 3, 1, 0
The largest element is: 5
Thank you and have a nice day!
```

Submission Details

You will write the assembly code in a file named `simpleprog.asm` and submit it to the Assignment 3 dropbox on D2L. Be sure to put your name in the comments at the top of the file. This is an individual assignment and improper collaboration will be penalized.

Please also use Autolab to test your work. Note that the test cases are not exhaustive and I will be using additional and more rigorous tests to determine your grade.

Grading Guidelines

You will be graded on the functionality of the program, adherence to the directions, and adherence to the style guide presented in class.