

CPE 223 Lab 2: MIPS Assembly Language Programming 1

1. Problem 1

Write a MIPS assembly program called Lab2-1.s. This program should call **system calls**. First, the program must prompt the user for an integer N, then read in that value from the user. Next, the program sums all integers from 1 to N, and then print out the result.

2. Problem 2

Write a MIPS assembly program called Lab2-2.s. This program should have a global integer array with 10 entries. The program itself should use a loop to sum the values in the array and then print the result to the console via a system call.

3. Submitting your files

You'll need to submit in LEB2 the source codes and the screen captures of the console, containing all of the input data and result.

System Calls

Service	Code	Args	Return	Remarks
print_int	01	\$a0		
print_float	02	\$f12		
print_double	03	\$f12		
print_string	04	\$a0		
read_int	05		in \$v0	
read_float	06		in \$f0	
read_double	07		in \$f0	
read_string	08		in buffer	a0 = buffer address, a1 = length
allocate	09	\$a0	in \$v0	a0 = size to allocate
exit	10			
print_char	11	\$a0		
read_char	12	char	in \$a0	