CMPE140 Lab 3 Task 2 Test Log
Algorithm 2

Programmer's Name: Nick Schiffer & Salvatore Nicosia

Checked by: _____, Date: 02/27/19

Adr	MIPS Instruction	Machine Code	Registers				Memory Content	
			$a0	$s0	$t0	$s	Word @ 0x00	Word @ 0x10
00	# addi $a0, $zero, 5 ($a0 = 5)	0x20040005	0x5	0	0	0	0	0
04	# addi $s0, $zero, 1 ($s0 = 1)	0x20100001	0x5	0x1	0	0	0	0
08	# sw $a0, 0($zero) (mem[$zero + 0] = $a0)	0xAC040000	0x5	0x1	0	0	5	0
0C	# slti #RD, $a0, 1 (if ($a0 < 1) #RD = 1 else #RD = 0)	0x28880001	0x5	0x1	0	0	5	0
10	# bne $t0, $zero, 4 (if ($t0 != $zero) goto 4)	0x14080004	0	0x78	1	0	5	0
14	# mult $s0, $a0 ($hi = High($s0 * $a0); $lo = Low($s0 * $a0))	0x02040018	0	0x78	1	0	5	0
18	# mflo $s0 ($s0 = $lo)	0x00008012	0	0x78	1	0	5	0
1C	# addi $a0, $a0, -1 ($a0 = $a0 + -1)	0x2084FFFF	0	0x78	1	0	5	0
20	# j 0x0003 (jump to addr 0x000C)	0x08000003	0	0x78	1	0	5	0
24	# sw $s0, 16($zero) (mem[$zero + 16] = $s0)	0xAC100010	0	0x78	1	0	5	78
28	# j 0x0000 (jump to addr 0x0000)	0x08000000	0	0x78	1	0	5	78