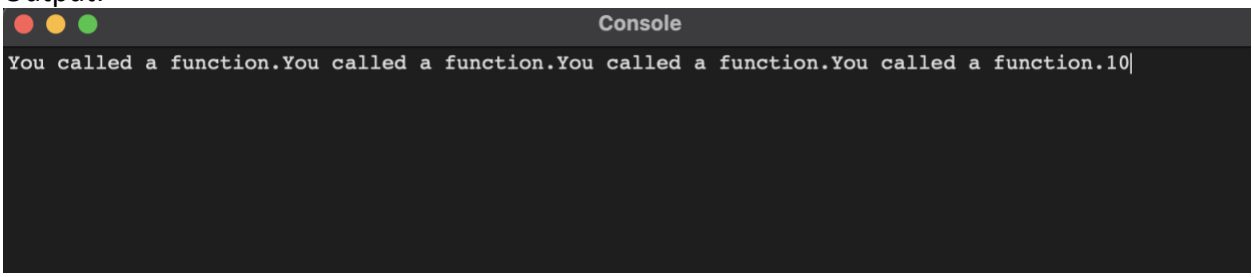
Zach Healy

Question 1
Assembly Code:

```
# Program header
# lab13.s

.data
    called:   .asciiz "You called a function."

# code section
.text
.globl main

main:

    # Set the values for $a0 and $s1
    li $s0, 4
    li $s1, 5

    jal func

    li $v0, 10
    syscall

func:
    li $t0, 0
    lw $a2, called
    loop:
        li $v0, 4
        la $a0, called
        syscall

        add $t0, $t0, 1
        blt $t0, $s0, loop

    add $s1, $s1, $s1
    li $v0, 1
    move $a0, $s1
    syscall

    jr $ra
```

Output:



Question 2:
Assembly Code:

```
# Program header
# lab13pt2.s

.data
    arr: .word 4, 5, 7, 1, 19, 2, 6

# code section
.text
.globl main

main:

    # Set the values for $t2 and $t3
    la $t2, arr
    li $t3, 7

    jal func

    #print out sum
    move $a0, $v0
    li $v0, 1
    syscall

    li $v0, 10
    syscall

func:
    li $t0, 0 #counter
    li $t1, 0 #max value
    loop:
        lw $t4, 0($t2)
        blt $t1, $t4, loop2

        add $t0, $t0, 1 #counter
        add $t2, $t2, 4
        blt $t0, $t3, loop

    move $v0, $t1

    loop2:
        move $t1, $t4

        add $t0, $t0, 1 #counter
        add $t2, $t2, 4
        blt $t0, $t3, loop

    jr $ra
```

Output: