

## Quiz 1

There is a string declared in the data section.

Write an assembly program that counts the number of spaces in the string and stores the number at symbolic address **spaceNum**. Recall that the byte that represents a space is 0x20. Submit one .s or .asm file.

The partial code is given. Finish the program.

```
.text
.globl main
main:
    li $s0, 0      #sum = 0
    li $s1, 0x20   #s1 holds the space character
    la $t0, str    #t0 holds the address of the first character
loop:
    lbu $t1, 0($t0) #t1 holds the first character
    nop
    beq $t1, $0, endlp
    nop

endlp:
    sw $s0, spaceNum #store the sum in spaceNum

    li $v0, 10      #exit the program
    syscall

.data
spaceNum: .word 0
str: .asciiz "Is this a dagger which I see before me?"
```