

# CS6107 - Computer Architecture Integrated Lab

## Batch : P

### LAB 5 - Spot questions

1. Write a function to count the number of vowels in a given string and also return the string after removing the vowels and print that string in main function. Call the function twice with two different strings

For these programming exercises, use only those instructions that have been discussed so far in these notes:

add	div	mflo	slt, slti
addi	divu	mult	sltu, sltiu
addiu	j	multu	sra
addu	lb	nor	srl
and	lbu	or	sub
andi	lh	ori	subu
beq	lhu	sb	sw
bgez	lui	sh	xor
bltz	lw	sll	xori
bne	mfhi		

### 2. Space Removal - Declare a string in the data section:

```
.data
string: .asciiz "Is this a dagger  which I see before me?"
```

Write a program that removes all the spaces from the string so that the resulting string looks like:

```
.data
string: .asciiz "IsthisadaggerwhichIseebeforeme?"
```

Be sure to end the result string with a null after its final character.

Easy version: declare a second buffer to hold the result string. Transfer non-space characters from the input string to the result string.

Medium-hard version: Use only the buffer that holds the original string. Use two character pointers, one for the current character and another for its destination.

The logic for this can be tricky. Figure out how you would do it with characters arrays in C or Java before you try it with assembly. For testing, use a data string such as the following:

```
.data  
string: .asciiz "aaaa bbbb cccc dddd eeee"
```