

# July 2023 CSE 316

## Online on the 8086 Assembly Language

### Subsections: B1, B2

December 17, 2023

Suppose, you have a string consisting of only lowercase vowels and lowercase consonants as its characters. Your task is to count the total number of vowels and consonants in the string. You do not need to take the string as the user input, you may declare a string in the data segment of your program. You must use loops to iterate the characters in the string.

#### Sample I/O

##### *Case 1*

##### **Input**

uyhitnae

##### **Output**

Vowel Count: 4

Consonant Count: 4

##### *Case 2*

##### **Input**

qwertykeyboards

##### **Output**

Vowel Count: 4

Consonant Count: 11

##### *Case 3*

##### **Input**

eruiaaaageruiaaaag

##### **Output**

Vowel Count: 12

Consonant Count: 4

#### Marks Distribution

- Properly declaring the string in the data segment: **1 Mark**
- Iterating the characters in a loop: **2 Marks**
- Determining and storing the number of vowels in the strings correctly (in memory, register or stack): **3 Marks**

- Determining and storing the number of consonants in the strings correctly (in memory, register or stack):  
**3 Marks**
- Printing the output in the given format to the console: **1 Mark**