

Count characters

Problem Description: You have to count and print the total number of characters (lowercase english alphabet only), digits (0 to 9) and white spaces (single space, tab i.e. '\t' and new line i.e. '\n') entered till '\$'. Print count of characters, count of digits and count of white spaces respectively (separated by space).

How to approach?

1. Take the stream of characters as input from the user using `cin.get()` as `cin` doesn't counts white spaces and new line.
2. Initialize all the 3 counts of characters, digits and spaces from 0.
3. Run a while loop until we get '\$' as input.
4. Check whether it is a character, digit or space and increment their respective count.

Pseudo Code for this problem:

Input = ch

character=spaces=digits=0

While ch!='\$':

If ch lies between 'a' and 'z':

Increment the character count

If ch lies between '0' and '9':

Increment the digit count

If ch lies is a space or tab or new line:

Increment the space count

Input = ch

❑ Let us dry run the code:

abc def4

5\$

- Take input for 1st character 'a'
So, increment the character count=1
- Go for the next input character 'b'
So, increment the character count=2

- Then we take the next input 'c'
Increment the character count to 3.
- Go for the next input which is ' '
Increment the space count=1
- Then we take the next input 'd'
Increment the character count to 4.
- Then we take the next input 'e'
Increment the character count to 5.
- Then we take the next input 'f'
Increment the character count to 6.
- Then we take the next input '4'
Increment the digit count to 1.
- Then we take the next input '\n'
Increment the space count to 2.
- Then we take the next input '5'
Increment the digit count to 2.
- Then we take the next input '\$'
We will not enter into while loop and we will print character, digit and white space count.
Output :
6 2 2