

Length of Last Word

Question: Given a string *s* consists of upper/lower-case alphabets and empty space characters ' ', return the length of last word in the string. If the last word does not exist, return 0.

Note: A word is defined as a character sequence consists of non-space characters only.

For example,

Given *s* = "Hello World",

return 5.

Solutions:

class Solution:

```
# @param s, a string
```

```
# @return an integer
```

```
def lengthOfLastWord1(self, s):
```

```
    return len(s.split()[len(s.split())-1]) if s.split() != [] else 0
```

```
# @param s, a string
```

```
# @return an integer
```

```
def lengthOfLastWord2(self, s):
```

```
    s = s.strip()    # Remove the spaces at the beginning and end
```

```
    length = 0
```

```
    for letter in s:
```

```
        if letter == " ": length = 0 # Waiting for the next word
```

```
        else:             length += 1 # Inside one word
```

```
    return length
```

```

# @param s, a string
# @return an integer
def lengthOfLastWord3(self, s):
    preLength = 0 # Length of previous word
    length = 0    # Length of current word
    for letter in s:
        if letter == " ":      # Waiting for the next word
            if length != 0:    # This is a single zero or
                                # leading one in zeros
                preLength = length
                length = 0
            else:              # A following zero in zeros
                pass
        else:
            # Inside one word
            length += 1
    if length == 0: return preLength # s ends with zero(s)
    else: return length # s ends with word

print ( Solution().lengthOfLastWord1("Hello World") )
print ( Solution().lengthOfLastWord2("Hello Worlds") )
print ( Solution().lengthOfLastWord3("Hello Everybody") )

```