

## Analysis of Algorithms

Algorithm	Time Complexity	Space Complexity
1) <code>getLargestWord()</code>	$O(n)$ where $n$ = character count of input string	$O(1)$ : the algorithm doesn't require any additional space.
2) <code>getCharCount()</code>	$O(n)$ where $n$ = length of input string	$O(1)$ : the algorithm doesn't require additional data structure.
3) <code>checkAllIndrome()</code>	$O(n^2) \approx O(n)$ ... asymptotic property $n$ = length of input string	$O(1)$ : the algorithm doesn't require additional data structure.
4) <code>getSubstringIndex()</code>	$O(n \cdot k)$ where $n$ = length of main string $k$ = length of substring.	$O(1)$ : The algorithm doesn't require additional data structure.

→ `getAllWordsCount()`

$O(n^2)$

where  $n$  = length of  
input string.

$O(n)$ : to store each  
word in additional data  
structure.