

Program Design Task:

The goal of this lab is to implement the specified assistance functions in accordance with the guidelines outlined below. As a result, will help to ensure a stable implementation of the Porter Stemming Algorithm, which will be at the heart of the BearING search engine.

There are 9 functions

1. `is_vowel` will return true when the argument of it is a vowel. Otherwise, return false.
2. `is_consonant` returns true when the argument of it is a consonant and false otherwise.
3. `ends_with` which contains two strings, candidate and suffix (in order) will return true when candidate and suffix are empty strings. Otherwise, it returns false. If candidate ends with suffix, `ends_with` returns true. Otherwise, it returns false.
4. `ends_with_double_consonant` returns true if the last two characters of the argument are both consonants, and equal to one another. It returns false otherwise.
5. `ends_with_cvc` returns true if the last 3 characters of the argument are a consonant, a vowel, and then a consonant. It returns false otherwise.
6. `count_consonants_at_front` will return the number of the consonants from the beginning of the string until it reaches the first vowel in that string.
7. `count_vowels_at_back` returns the number of the vowels at the end of the arguments (right after the last consonant).
8. `contains_vowel` will return true if there is at least 1 vowel in the string. It returns false otherwise.
9. `new_ending` creates a new string from candidate by removing its last suffix length characters and replacing them with replacement. The `num_ending` returns that new string.