Python – Lab exercise 5

1. You are required to write a function that receives as input parameters the times for two events (such as 3pm and 11am), determines whether the first event occurs before the second event, at the same time, or after the second event, and prints "Before", "Same", or "After" accordingly. The signature of the function is given below:

   `find_chronology(time1, suffix1, time2, suffix2)`

   Here, suffix is "am" or "pm". For instance, to specify 3pm and 11am, the arguments would be time1=3, suffix1="pm", time2=11, suffix2="am". Assume that all times are in whole numbers, i.e., there is no time such as 11:20.

   For the above function, write the specification including doctests (test cases in docstring).

2. You are required to write a function that receives a string **s** as input parameter and returns **True** if the vowels in **s** are in alphabetical order, and returns **False** otherwise. In other words, the first occurrence of '**a**' (if any) appears before first **e** (if any), first '**e**' appears before first '**i**' if any etc. The signature of the function is as follows:

   `vowels_alphabetical(s)`

   Write the specification including doctests (test cases in docstring) for the function.

3. You are required to write the following function:

   `unique_vowels_in_word(s, case_sensitive=False)`

   that counts the number of unique vowels (a,e,i,o,u) in a given string `s`. Upper-case '`A`' and lower-case '`a`' should be considered as the same if `case_sensitive` is False (default case) and different otherwise. The function should return -1 if the string `s` contains any non-letter.

   Write the specification including doctests (test cases in docstring) for the function.

4. Write a function that accepts a string as input parameter and prints whether it is a palindrome or not. Ignore the case of the characters.

   Write the specification including doctests (test cases in docstring) for the function.