CSC108H Worksheet: Parallel Strings and Lists

For each function, complete the examples in the docstring and then complete the function body.

1. def stretch_string(s, stretch_factors):
   """ (str, list of int) -> str
   Precondition: len(s) == len(stretch_factors) and the values in stretch_factors are non-negative
   Return a string consisting of the characters in s in the same order as in s, repeated the number of times indicated by the item at the corresponding position of stretch_factors.
   >>> stretch_string('Hello', [2, 0, 3, 1, 1])
   'HHllllo'
   >>> stretch_string('echo', [0, 0, 1, 5])
   """

2. def greatest_difference(nums1, nums2):
   """ (list of number, list of number) -> number
   Precondition: len(nums1) == len(nums2) and nums1 != []
   Return the greatest absolute difference between numbers at corresponding positions in nums1 and nums2.
   >>> greatest_difference([1, 2, 3], [6, 8, 10])
   7
   >>> greatest_difference([1, -2, 3], [-6, 8, 10])
   """