

CSCA08H Winter 2022 Worksheet: Parallel Strings and Lists

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

1. `from typing import List`

```
def stretch_string(s: str, stretch_factors: List[int]) -> str:  
    """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.  
    Precondition: len(s) == len(stretch_factors) and the values in  
                  stretch_factors are non-negative
```

```
>>> stretch_string('Hello', [2, 0, 3, 1, 1])
```

```
'HHllllo'
```

```
>>> stretch_string('echo', [0, 0, 1, 5])
```

```
"""
```

2. `def greatest_difference(nums1: List[int], nums2: List[int]) -> int:`

```
    """Return the greatest absolute difference between numbers at corresponding  
    positions in nums1 and nums2.  
    Precondition: len(nums1) == len(nums2) and nums1 != []
```

```
>>> greatest_difference([1, 2, 3], [6, 8, 10])
```

```
7
```

```
>>> greatest_difference([1, -2, 3], [-6, 8, 10])
```

```
"""
```