Problem # 66: Plus One

<https://leetcode.com/problems/plus-one/>

My Solution:

1. Add one to the digit (starting with the right most at index = n -1 ). Set the counter for the index to n – 1 where n = length of digits. If it is the digit is less than 9, then add 1 to it and return the digits.

2. If the digit is 9, then set it to 0 and move one digit to the left (by decrementing the counter).

Then add one to the digit as in step 1.

3. Finally if we have not returned the digits as yet, return [1] + digits.

class Solution:

def plusOne(self, digits: List[int]) -> List[int]:

n = len(digits)

i = n -1

while i >= 0:

if digits[i] < 9:

digits[i] += 1

return(digits)

else: # digits[i] == 9:

digits[i] = 0

i -= 1

return([1] + digits)