# May 3, 2017

## <problems studied: reverse a string/words in a string, FizzBuzz>

For loop: loop among items in list

For i in range(0,maxium,1): # i is looping from 0, 1, 2, …, maxium-1. Or, maximum is the number of loops/length of the list.

Subsetting a list or string

List[start:end:step],

By default, start is the first, List[0]; end is the last, List[len(list)-1];

By default, step is 1; so it can also be written as List[start:end]

\*\*reverse a list --- List[::-1]

List.sort() vs. sorted(List)

List.sort changes List to the sorted, while sorted(List) does NOT change the List, but created a new list with the sorted sequence.

Bit-wise operations

^: XOR, take XOR on every bit of two numbers. a ^ b == b ^ a, a ^ (b ^ c) = (a ^ b) ^ c. 0 ^ a = a

So, “single number” problem.

Runtime complexity O(n), memory complexity, almost none, or O(1)