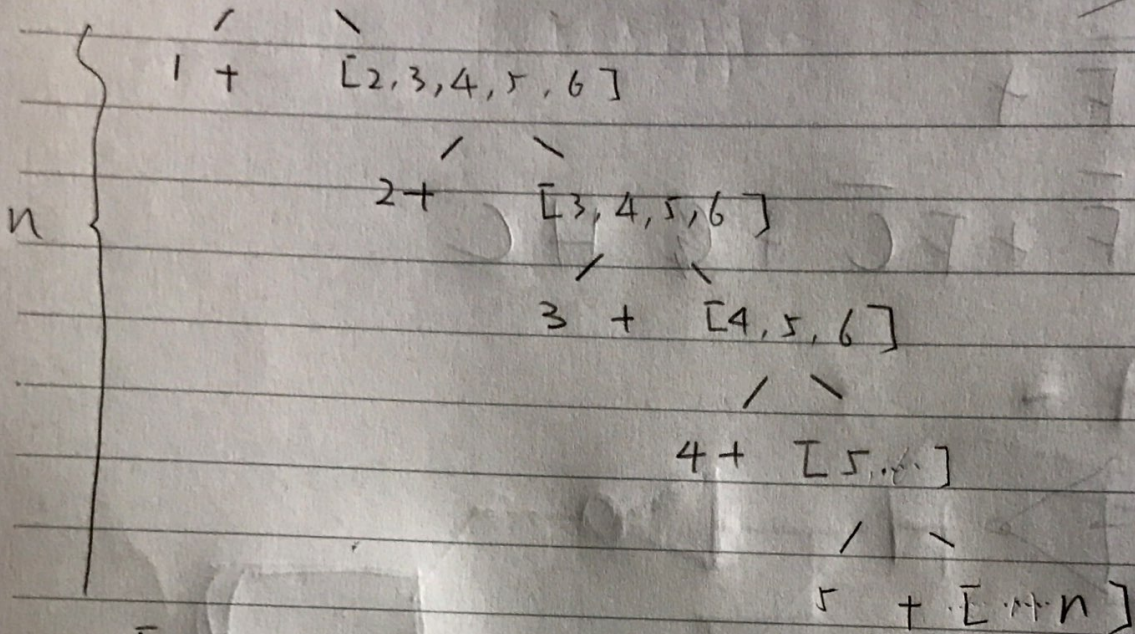


Q.

$lst = [1, 2, 3, 4, 5, \dots, n]$

$\gg \text{sum\_lst1}(lst)$

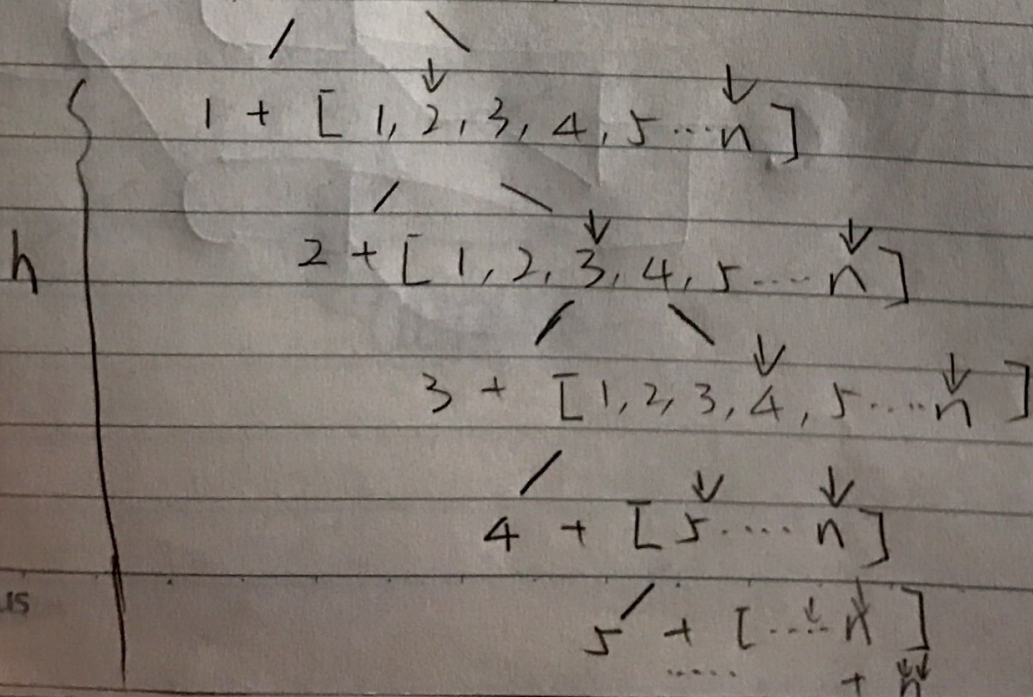
$[1, 2, 3, 4, 5, \dots, n]$



Every call to  $\text{sum\_lst1}(lst)$  is  $n$  (slicing  $lst$ ), asymptotically run time is  $O(n^2)$

$\gg \text{sum\_lst2}(lst)$

$[1, 2, 3, 4, 5, \dots, n]$





Every call to  $\text{sum-list2}(\text{lst})$  is 1,  
asymptotically runtime is  $O(n)$

The second version (with low and high indices) works faster

Q2:

a

def f(n):

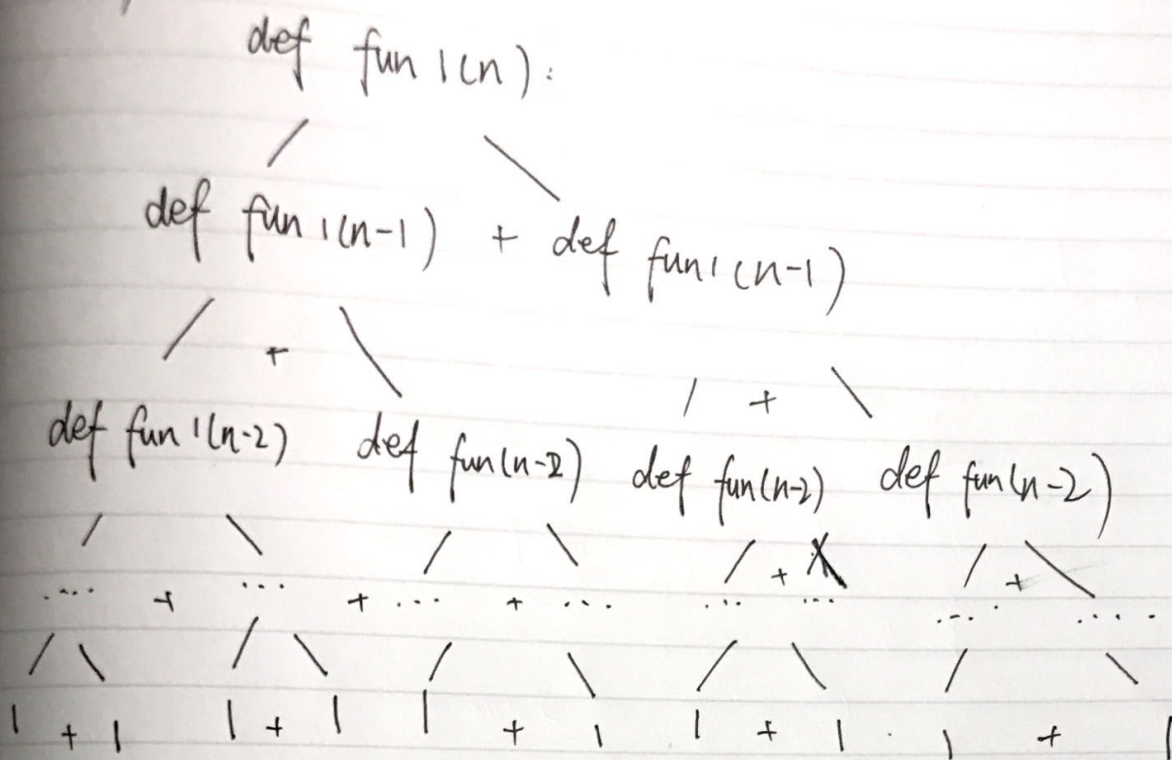
f(n-1)

f(n-1)

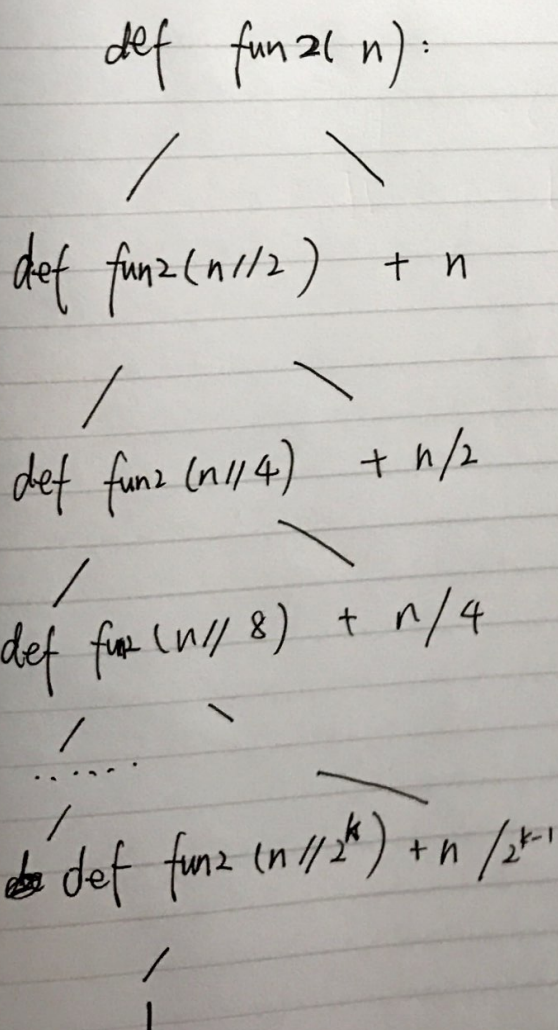
f(n-1)



a)



b)



c)

