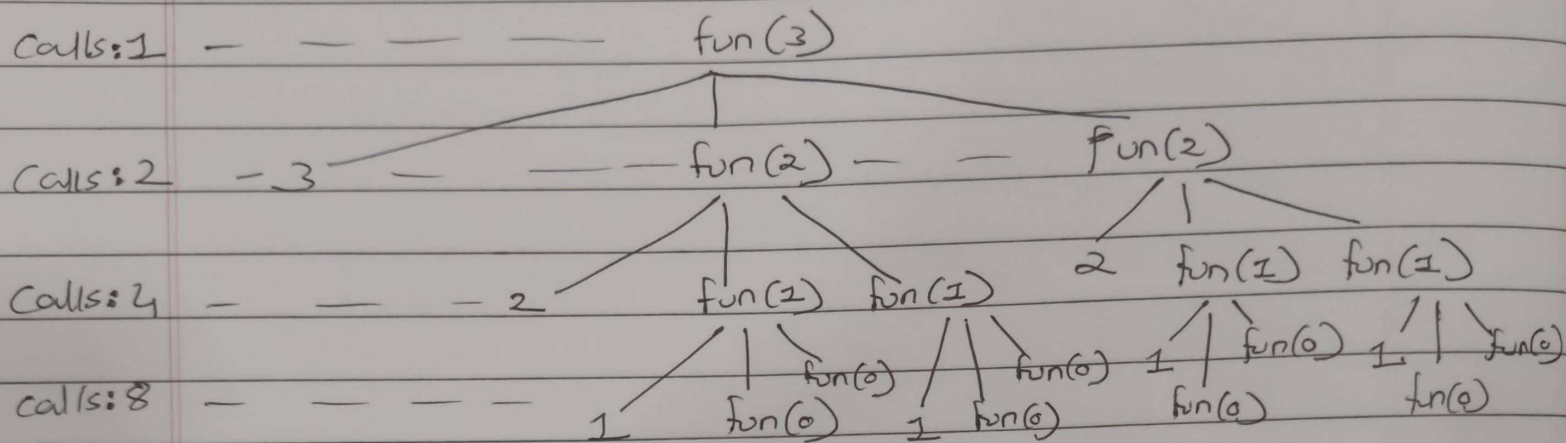


Function call of example in Rec - S. op?



$$1 + 2 + 4 + 8 = 15 \text{ ~~times~~ function calls}$$

$$2^0 + 2^1 + 2^2 + 2^3 = 2^{3+1} - 1 = 2^{n+1} - 1$$

$$\therefore \text{Time complexity} = O(2^n)$$

$$\text{Space complexity} = O(n)$$

(space = height of tree
if $x=3$, 4 is space,
 $x=n$, $n+1$ is space)