

Points Space complenity of recursive programs: I when we talked about the flow of securing program don you think that at any perficular (1) f(0) eg: 3 / 50 f(2) Ef(1) is there going to be a possibility for more than one function calls in this level to be in the stack at the same time? 2) Can we say that f(2) & f(0) are present in stack at the same time f(0).

Because this f(0) not even executed until f(2) finishes So, this 7, 8, 9 will for eg, will only exercise when the airs of 3 is given. Only calls that are interlinked with each Trick: other will be in the stack & at the same because the previous one will be uniding for the next one so execute, next one will be wait for the next one ... and there should be interlibed dogether at the same time.

from the fig :-Der eg when the function call no. 7 will be executing funt call no 2, 3, 4, 5, 6 would have been finished. De So, we suppose he tak function call no 7.

Then 2, 3, 4, 5, 6 would have been alreadented. Why?

Ecause those are not likned with function call no. 7 At one perticular level there won't be any more than one calls that are in the stack at the same time o. So, What is the maximus space that it'y be taking?

so, who know that the langest st chain stask from de socot all de leaf.

So, the longest chair will be the answer. :. Space complexity = height of the tree or pe Ans O(n): the space complexity when we'x Because these all will be in the stack at the Same dime so, the messimum and of space regently