Quiz 5

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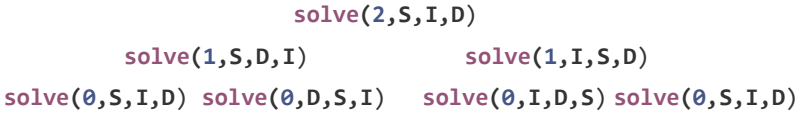
For each k, recursive Hanoi has to call solve method for 2^k+1 recursively.

As for dynamic Hanoi, the times of calling of solve method is depends on k. When k = 1 the times of call is 3, when k = 2 the times of call is 7 and when k>=3 the time of call is 3k+3.

Recursive Hanoi has no memorization, so it has to recursively call every solve method. For example when k=2



The dynamic Hanoi has the memorization. Since it only has 6 possibilities that SID,SDI,ISD,IDS,DSI,DIS. So the memorization can be saw as a 6 column array. Since we don't recursively call the step for k if the value in the array. When K>=3 , every time the k increase by one, we just add 3 So the times of call is linear and is 3k+3