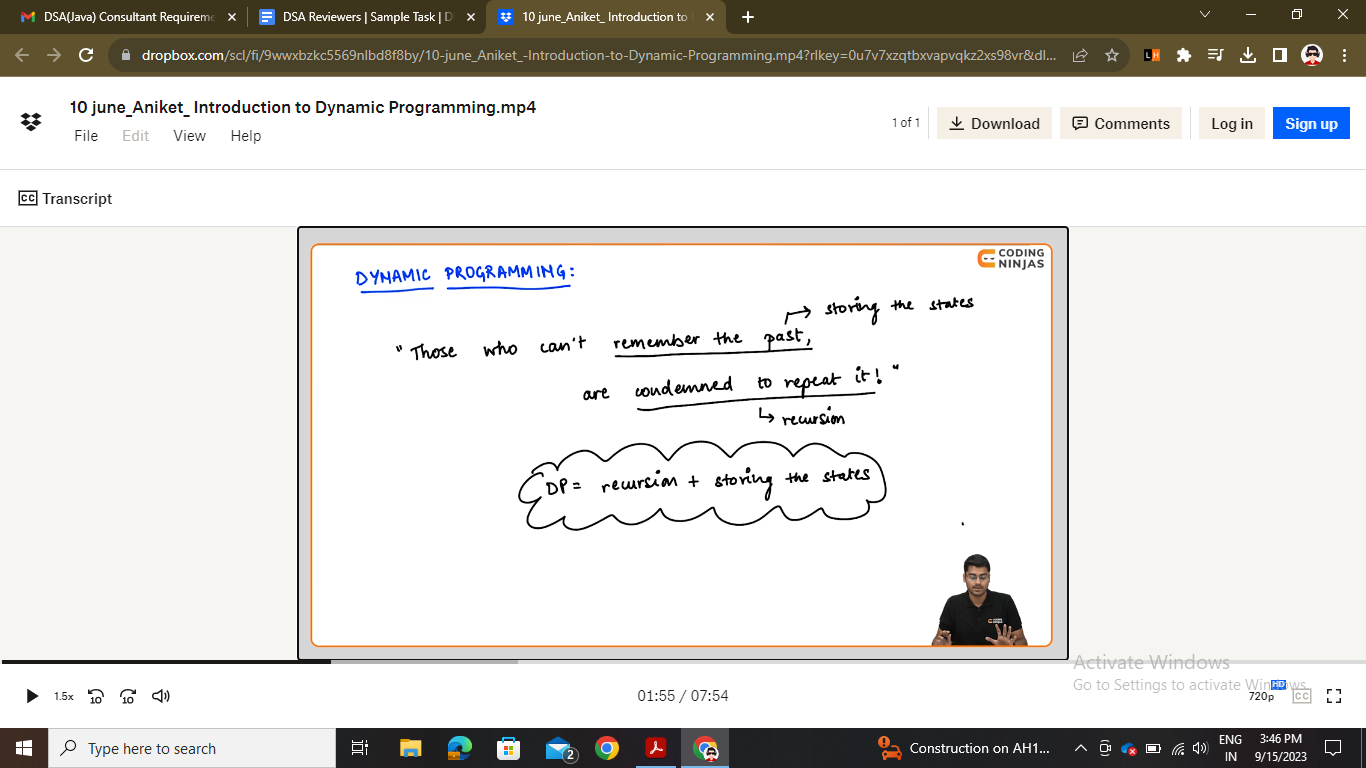
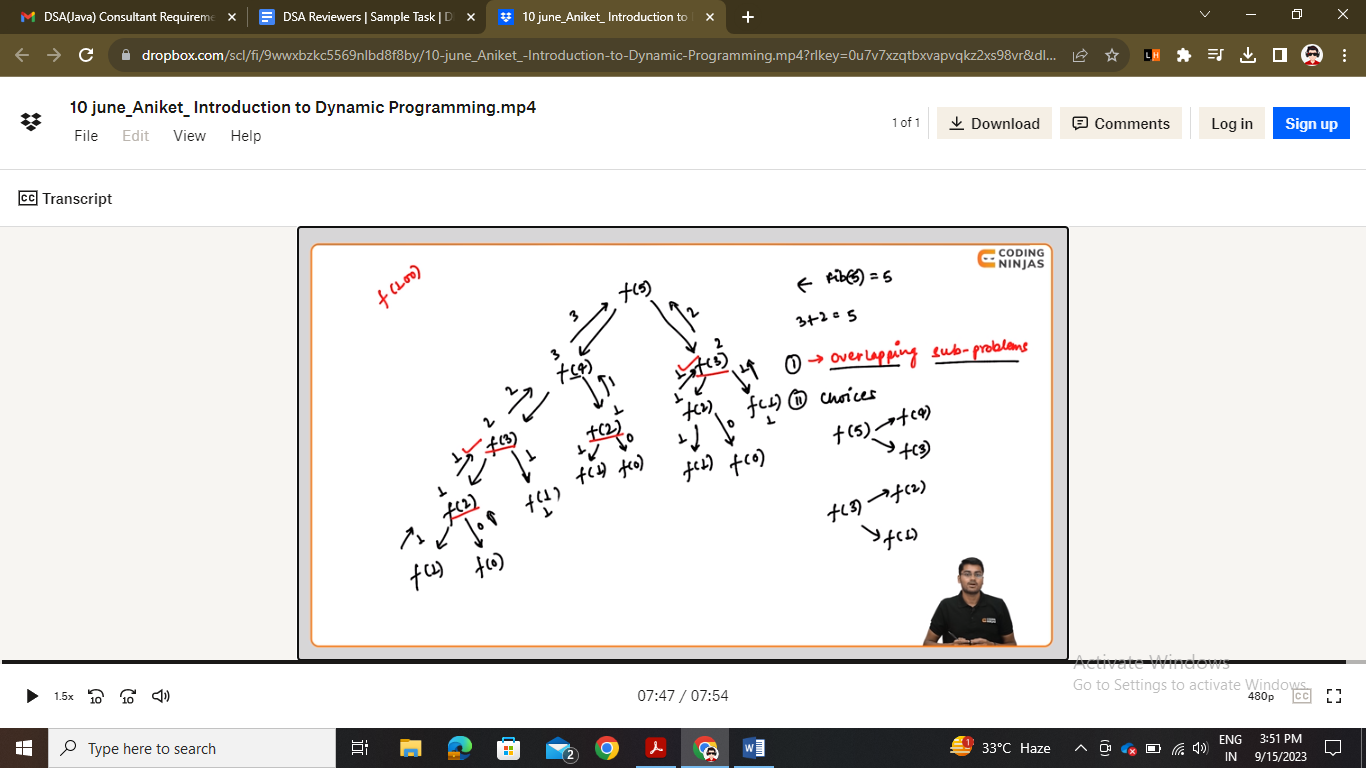
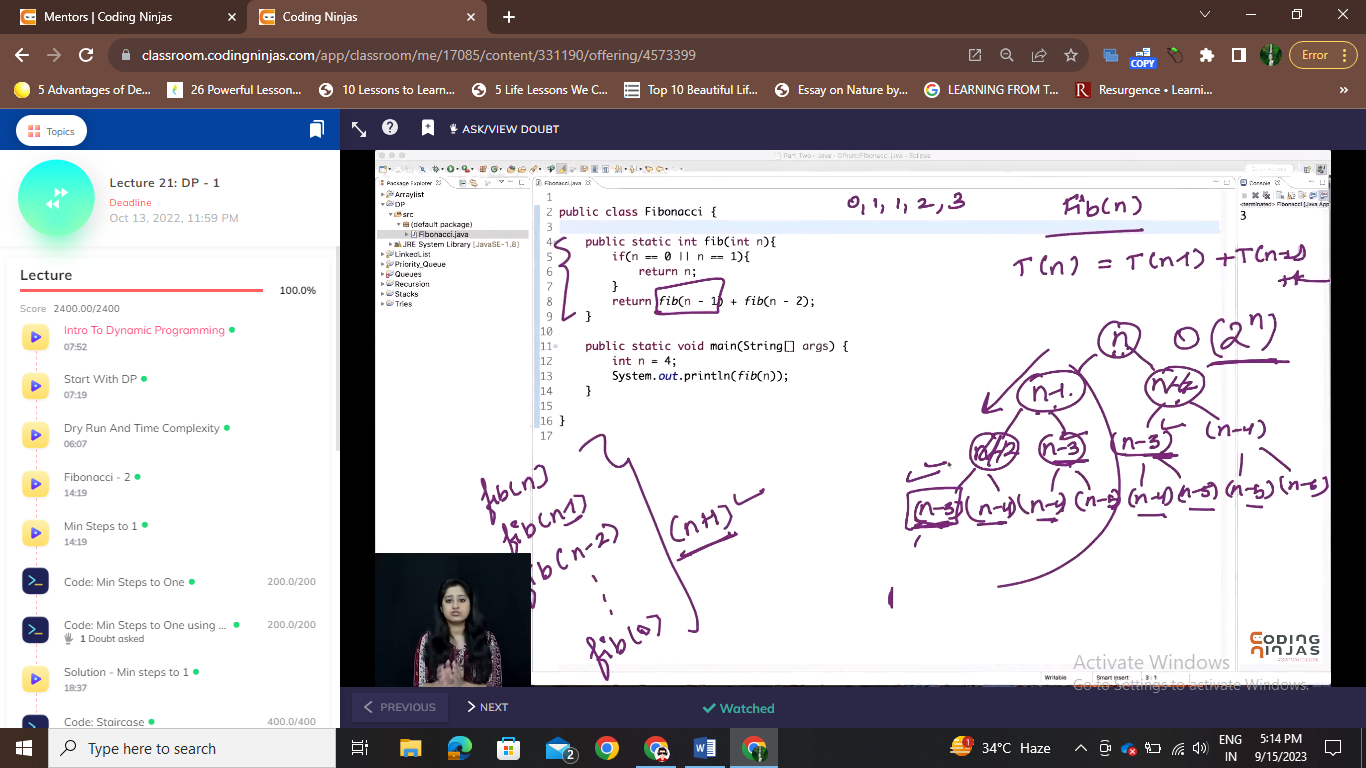
Lecture-1



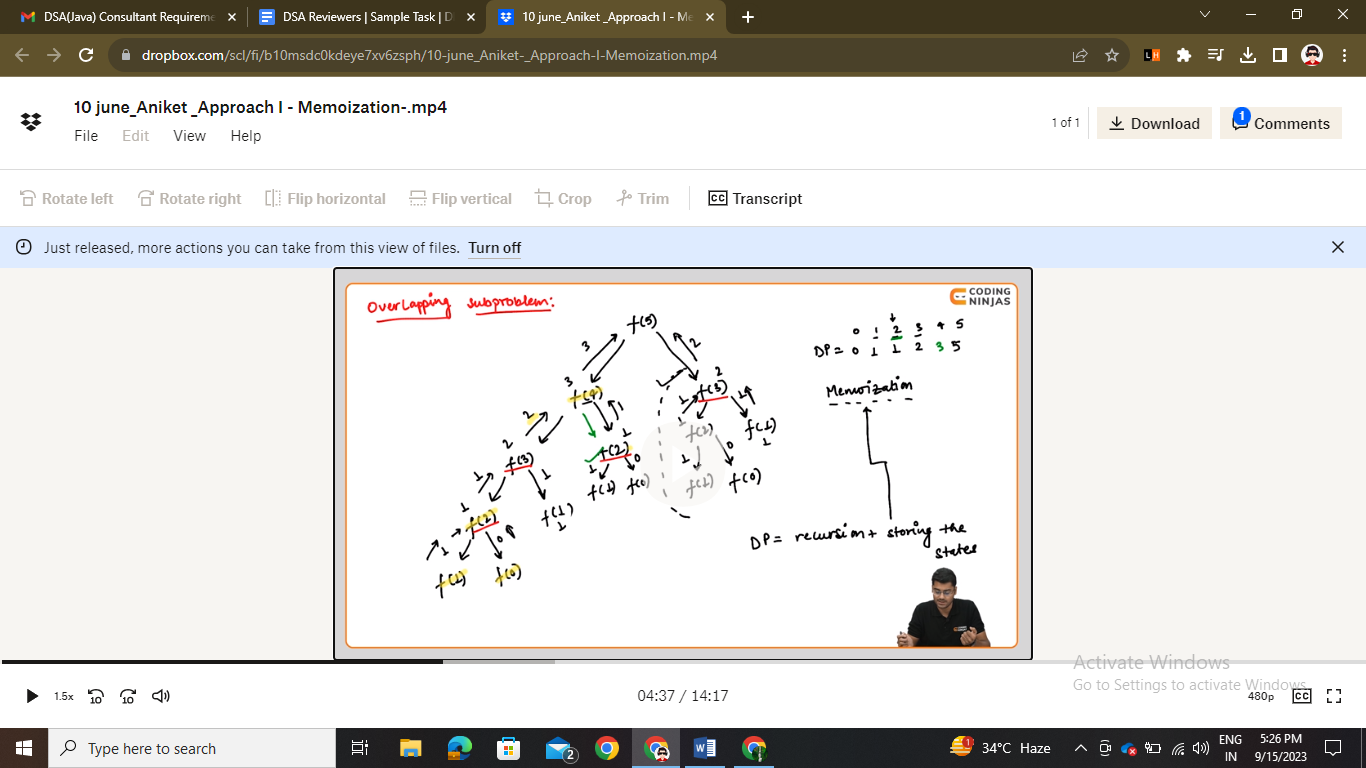


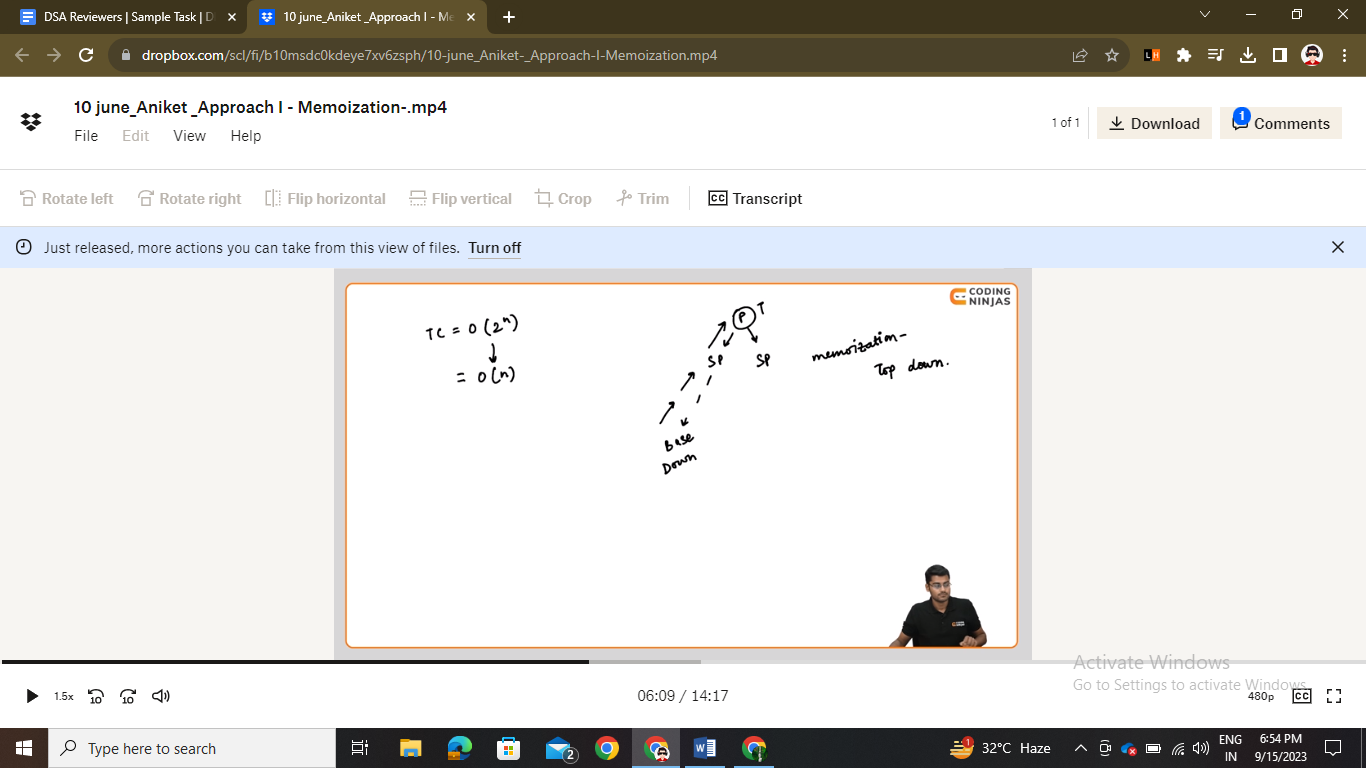
Two conditions of using dp

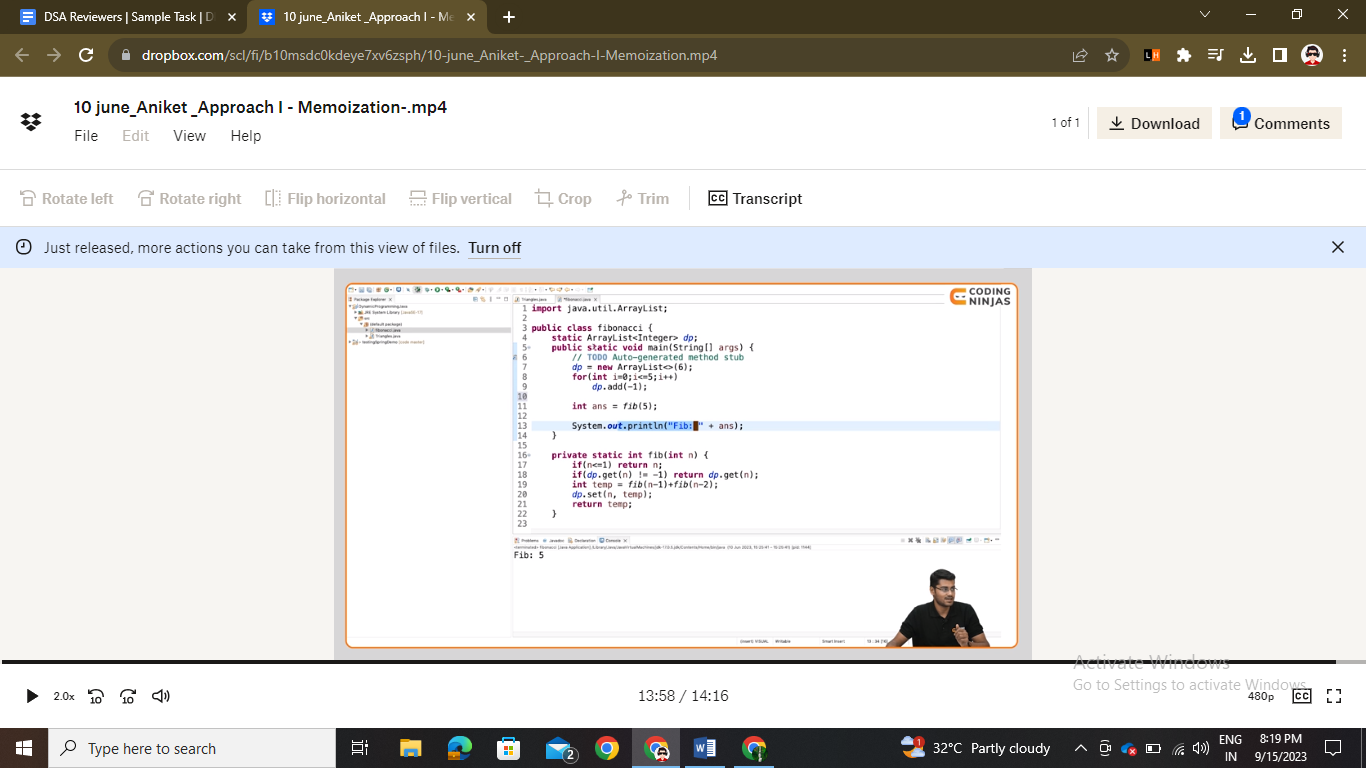
* Code of recursive-fib in background.
* F(n) -🡪 recursive tree bana chahiye -🡪 go to three levels -🡪 then explain by time complexity 2^n and by eliminating overlap states it should be o(n+1)



Lecture-2

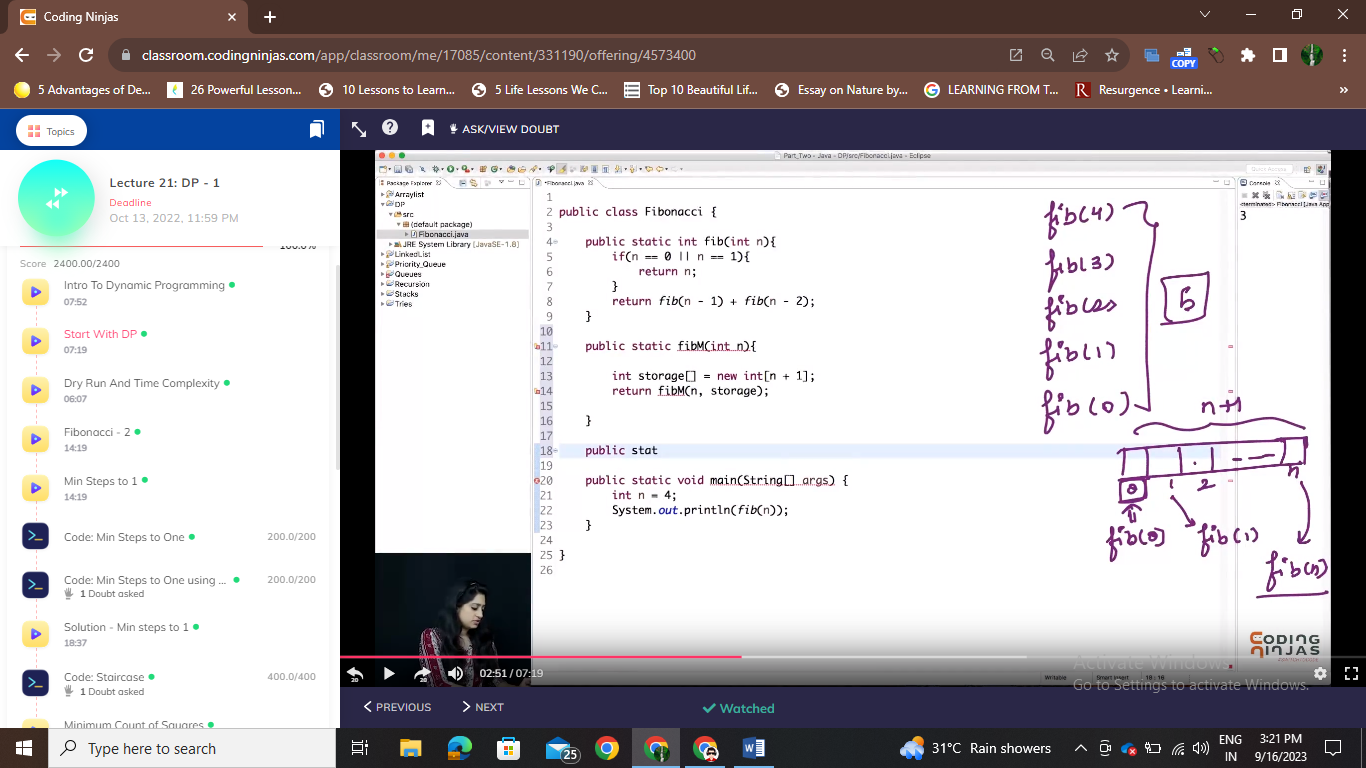


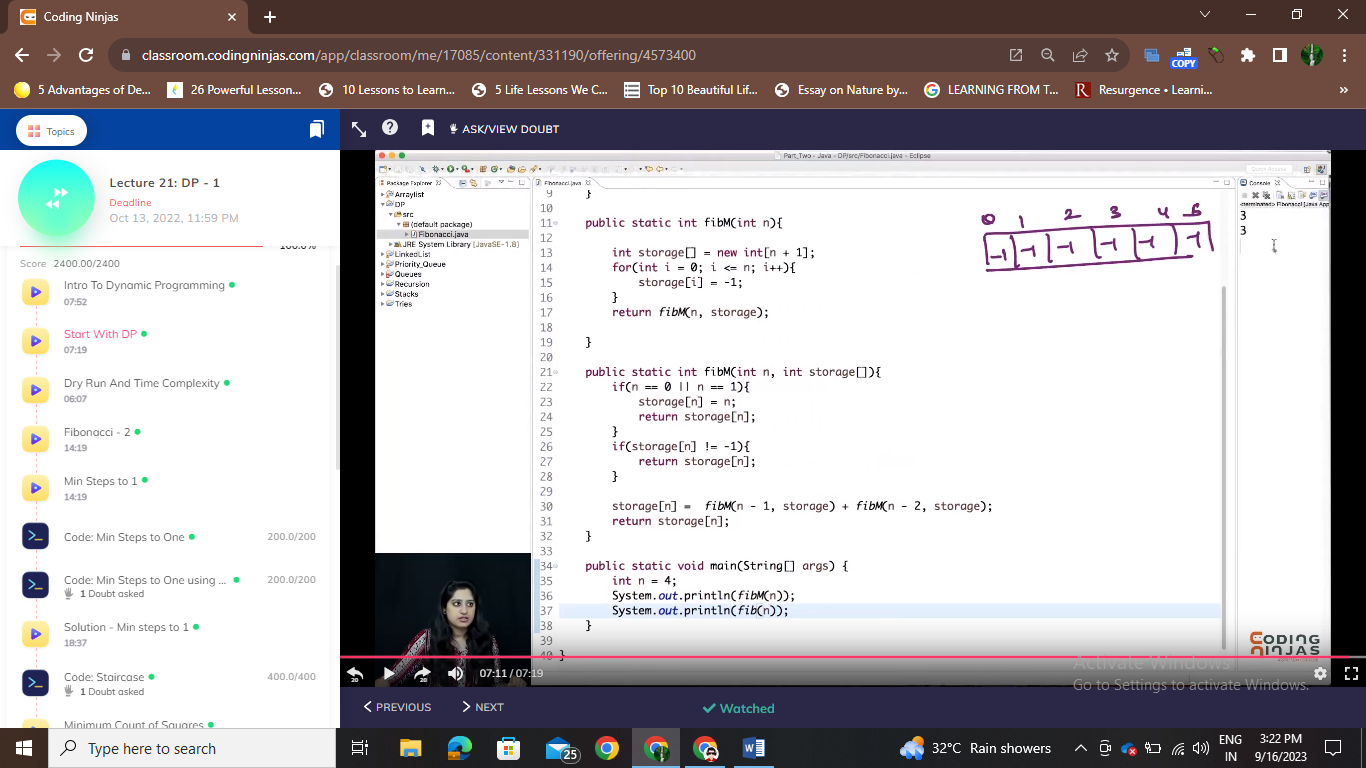




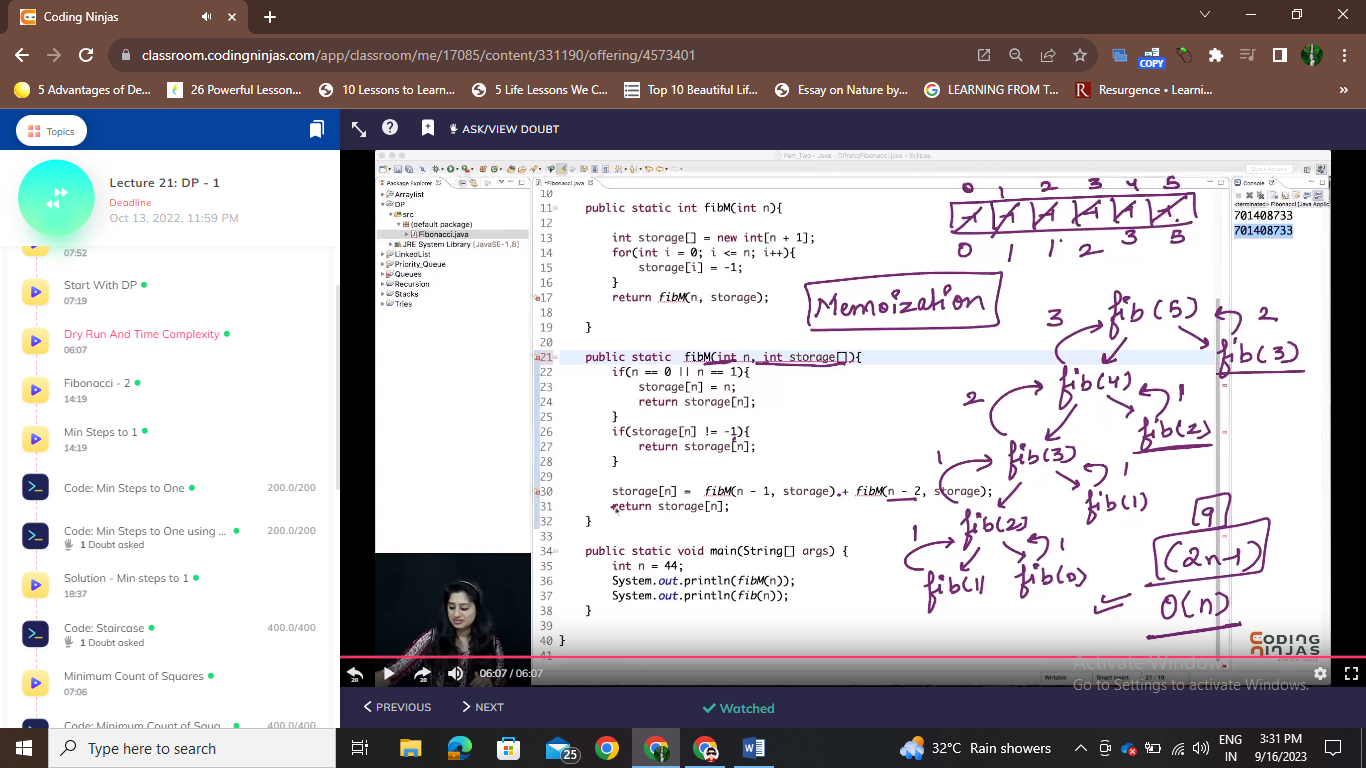
Changed from 2^n to linear o(n) and space complexity also o(n)

* 2 times eror shown

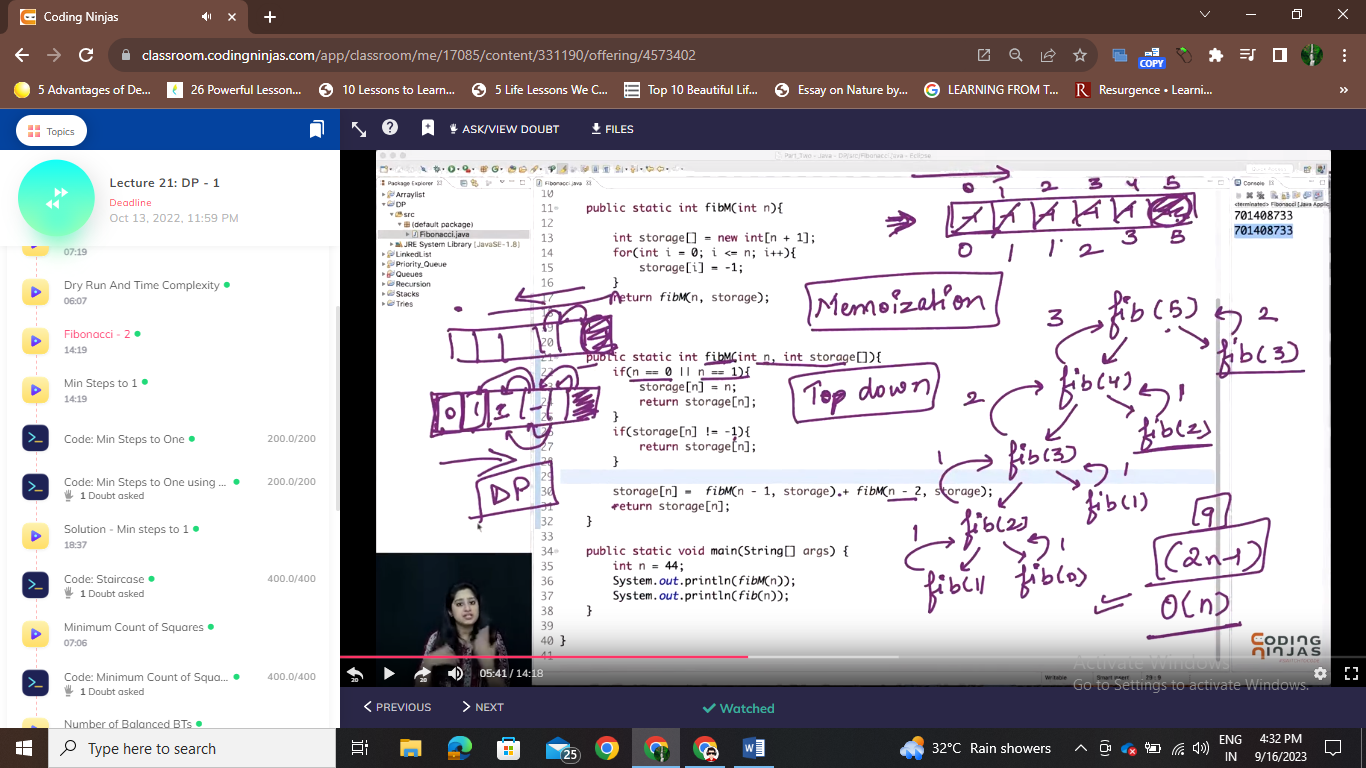




Lecture-3



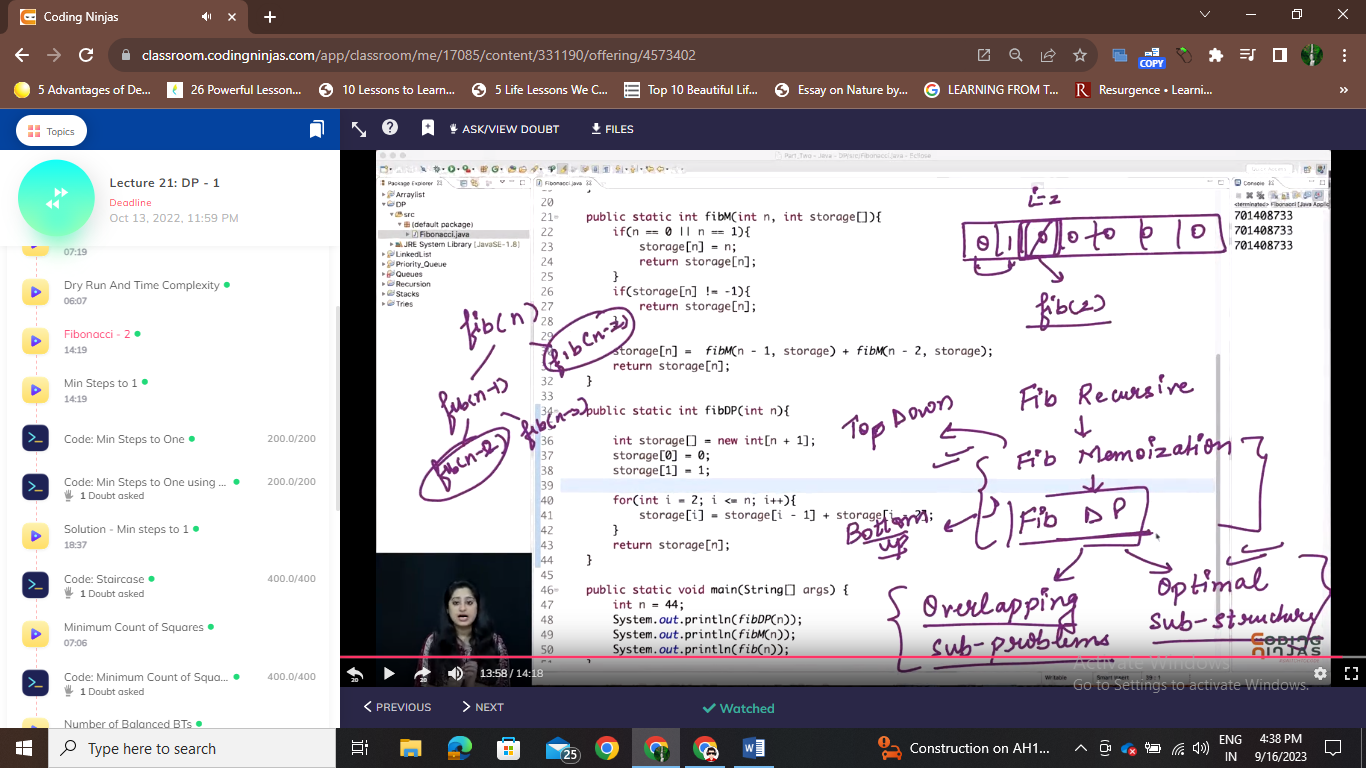
Lecture-4



1st normal approach (remove multiple states)

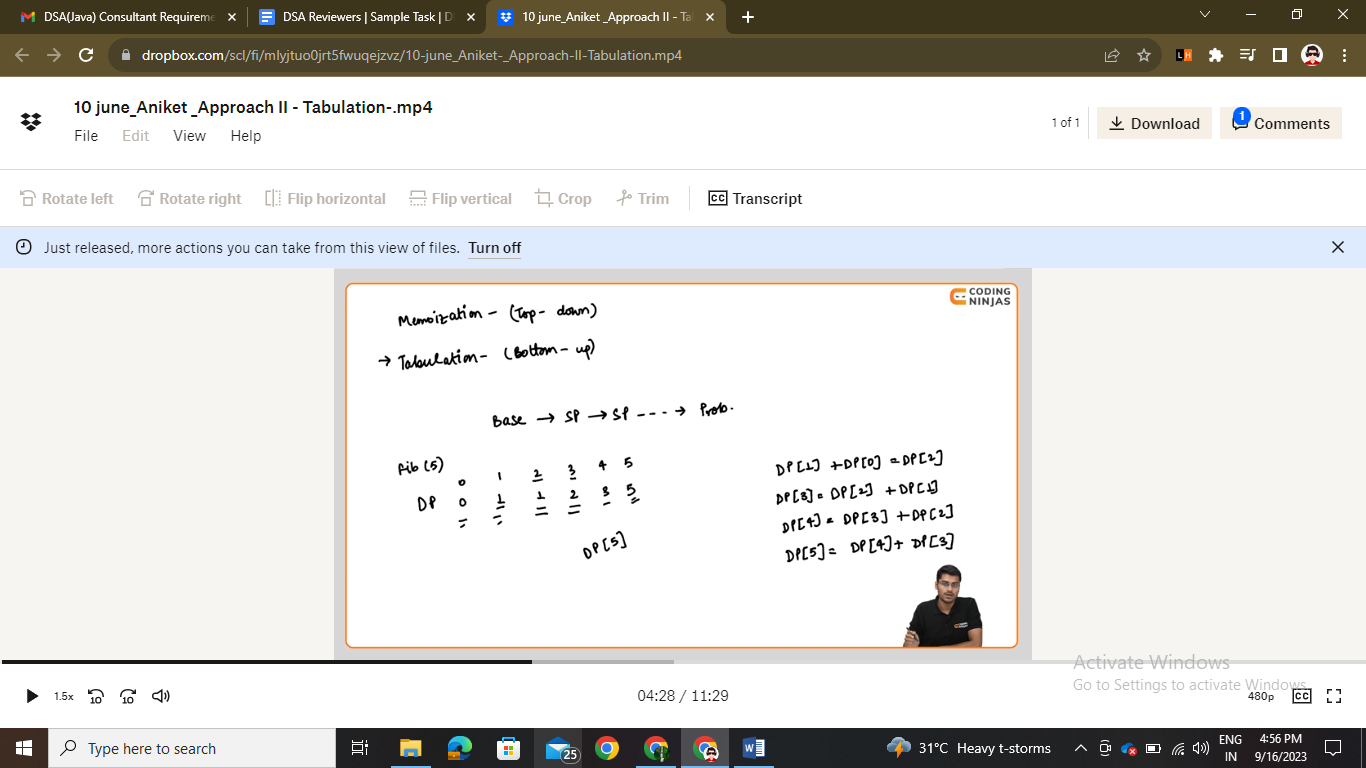
2nd memorization (top-down approach)(remove recursion)

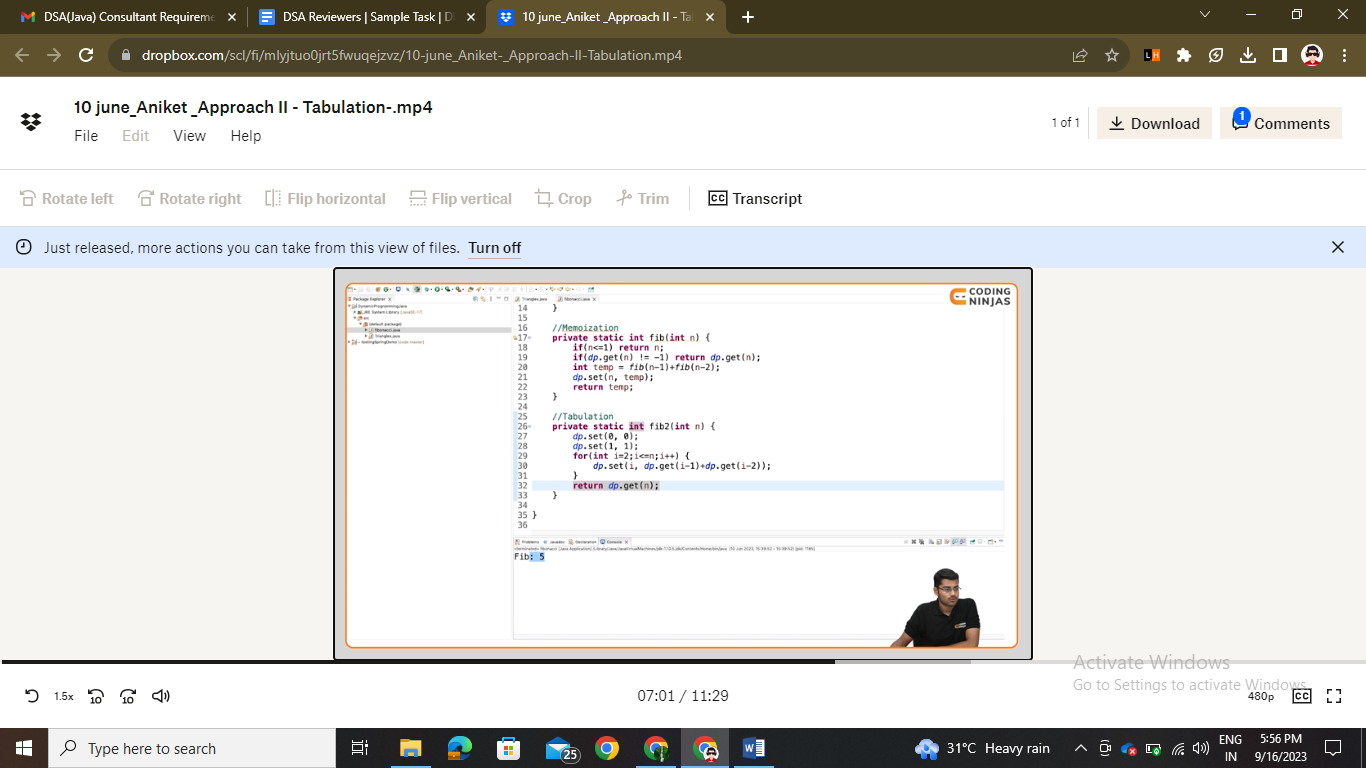
3rd dp (bottom-up approach)

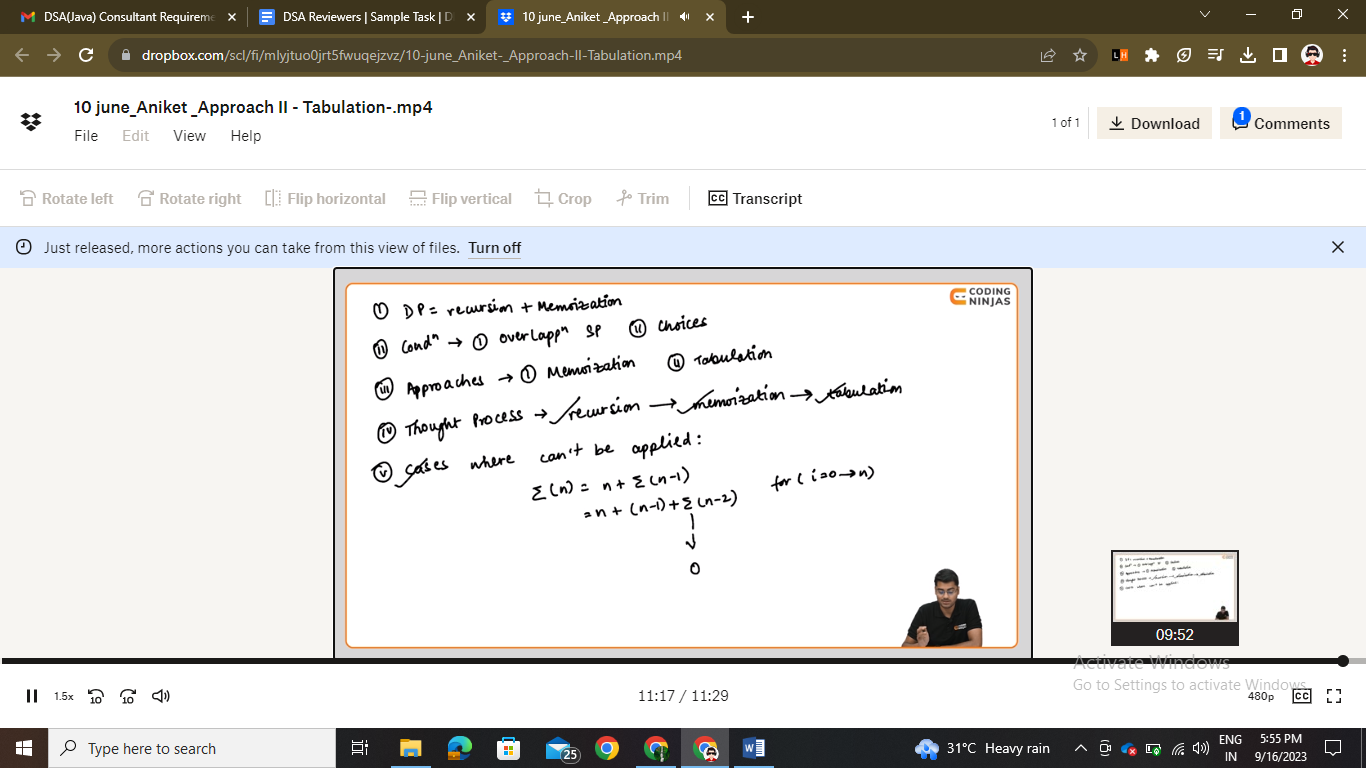


To use dp we should have two conditions

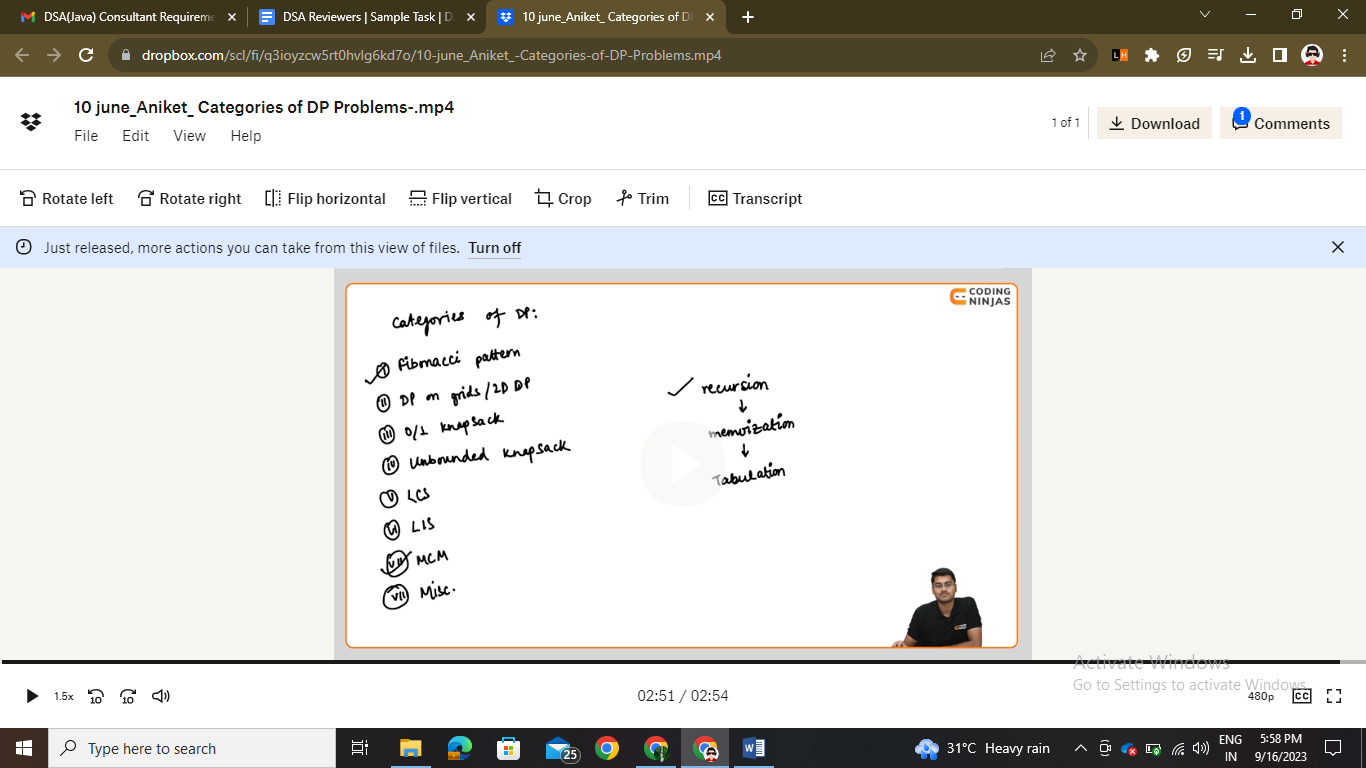
1. Overlapping subproblems
2. Optimal sub struvsture







Lecture – 5



* Fibonacci pattern
* Dp on grids
* 0/1 knapsack
* Unbounded knapsack
* LCS
* LIS
* MCM (matrix chain multiplication)

