Recursion, Backtracking and DP

Subsequence of “abc” 🡪 [“”,a,b,c,ab,bc,ac,abc] == 8 items.

String of length ‘n’ characters has

🡪(2^n) subsequence (items)

🡪 (2^(n-1)) pairs

🡪 number of characters = ((2^(n-1))\*n)

e.g

Lets say string length = 31 i.e n=31

(1 char == 1 bytes)

Characters = (2^30)\*31 = 31\*10^9 characters == 31 \* 10^9 bytes

You cannot store all characters in array bcoz of lack of RAM like for n=31 we need around 31gb memory so instead of storing it just print it after finding .