Dynamic Programming

Video - 62

Note :- This playlist is only for explanation of Qns & solutions.

See my DP Concepts & Qns playlist for understanding DP from Scratch...

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Leetcode -2707

~~Medium~~ → Easy

Simple Recursion + Memoization

Extra Characters in a String

Company :- { I will update soon in the Description }

2707. Extra Characters in a String

Medium 524 33 Add to List Share

You are given a **0-indexed** string `s` and a dictionary of words `dictionary`. You have to break `s` into one or more **non-overlapping** substrings such that each substring is present in `dictionary`. There may be some **extra characters** in `s` which are not present in any of the substrings.

Return *the **minimum** number of extra characters left over if you break up `s` optimally.*

Example :- s = "leetscode"

dictionary = ["leet", "code", "leetcode"]

output = 1

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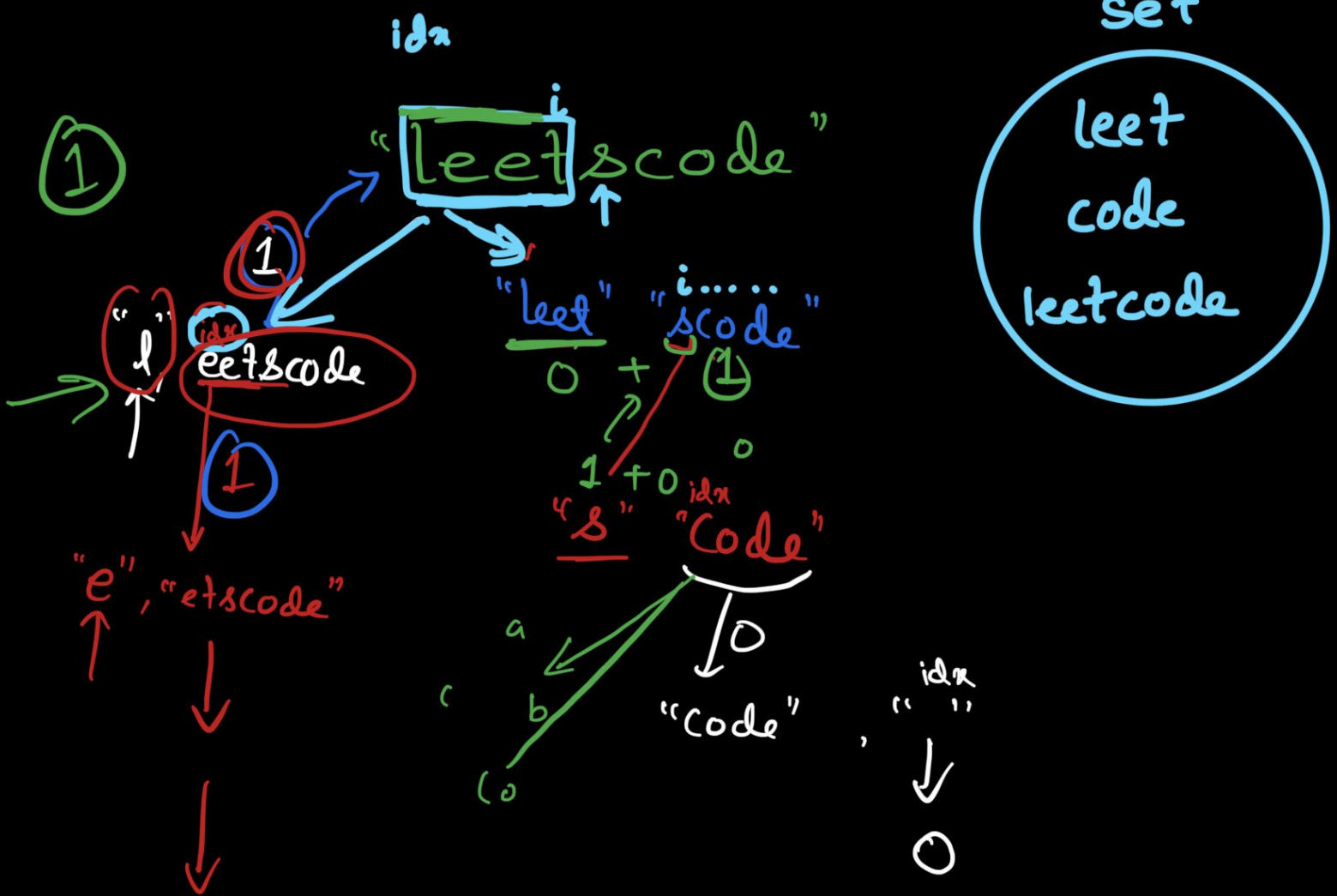

Solve (idx) {

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if (idx >= n)

return 0 ;

minExtra = n ;

CurrString = "" ;

for (int i= idx ; i<n ; i++) {

O(1)

CurrString . Push_back (S[i]) ; // "le"

if (st.find (CurrSubstr) == st.end()) {

CurrExtra = CurrSubt . length() ;

}

int remainExtra = Solve (i+1) ;

total = CurExtra + rem ;;

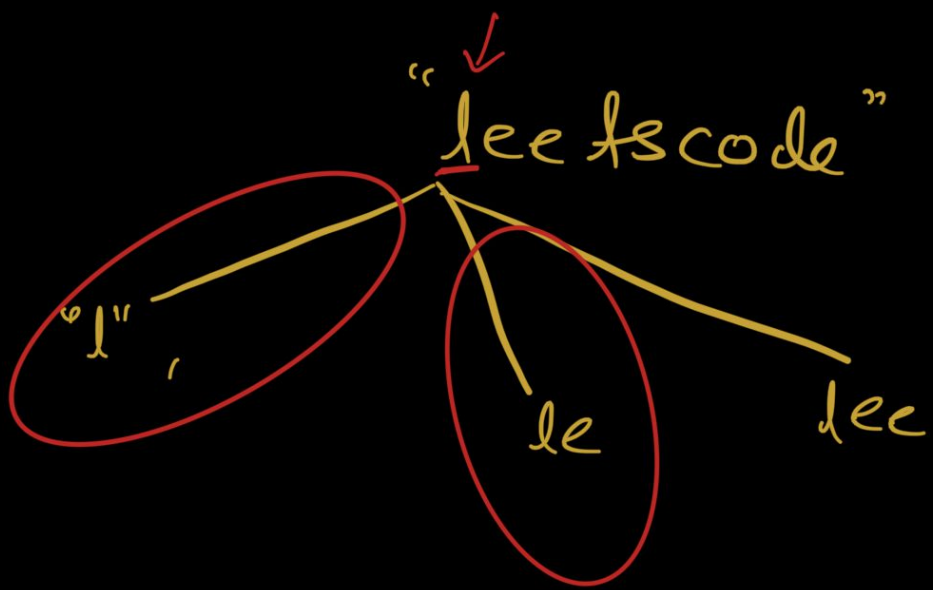
minExtra = min (minExtra, totalExtra) ;

}

}

Mix Extra:

Time Complexity :-



f(n+1)

n * n

quadratic