


Recursion {Day-7}

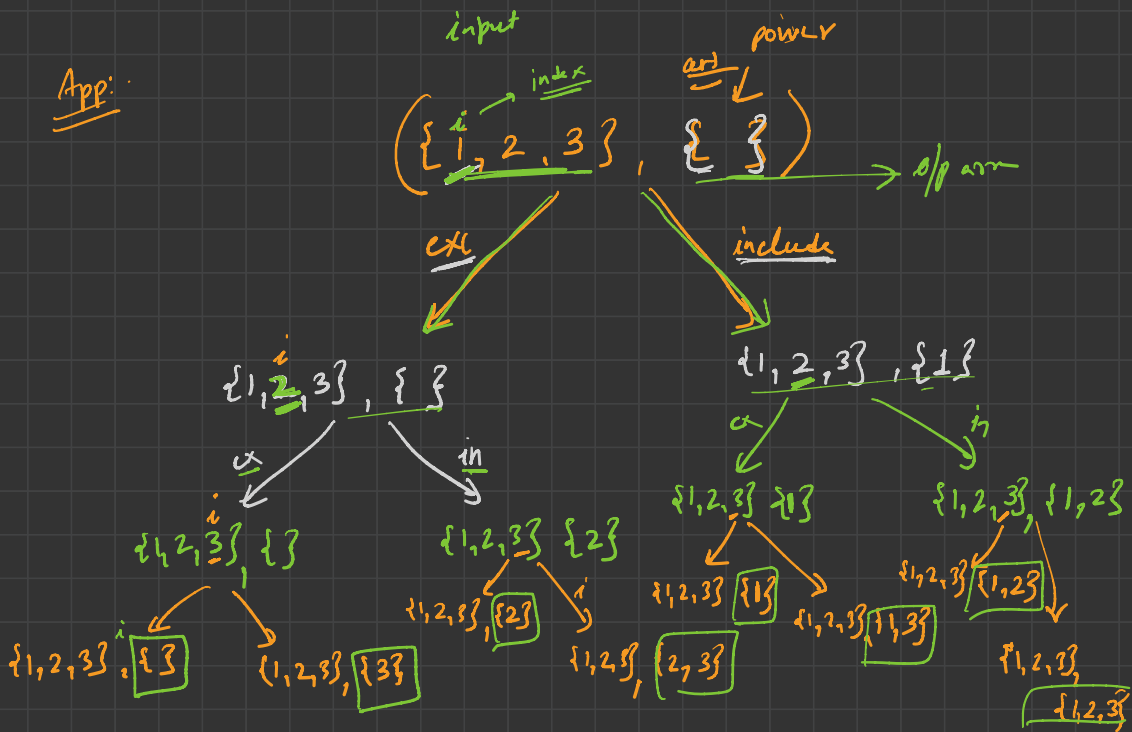
i/p \rightarrow arr [3] = {1, 2, 3} ⁽³⁾

o/p \rightarrow Power Set = {{} , {1}, {2}, {3}, {1, 2}, {2, 3}, {1, 3}, {1, 2, 3}}

2^n set of all subset

$$2^3 = 8$$

App:



→ Subsequences

str = "a b c" → n → length of string

~~bc~~

a ~~bc~~

abc

a ~~bc~~

~~a~~ ~~bc~~

~~a~~ ~~bc~~

abc

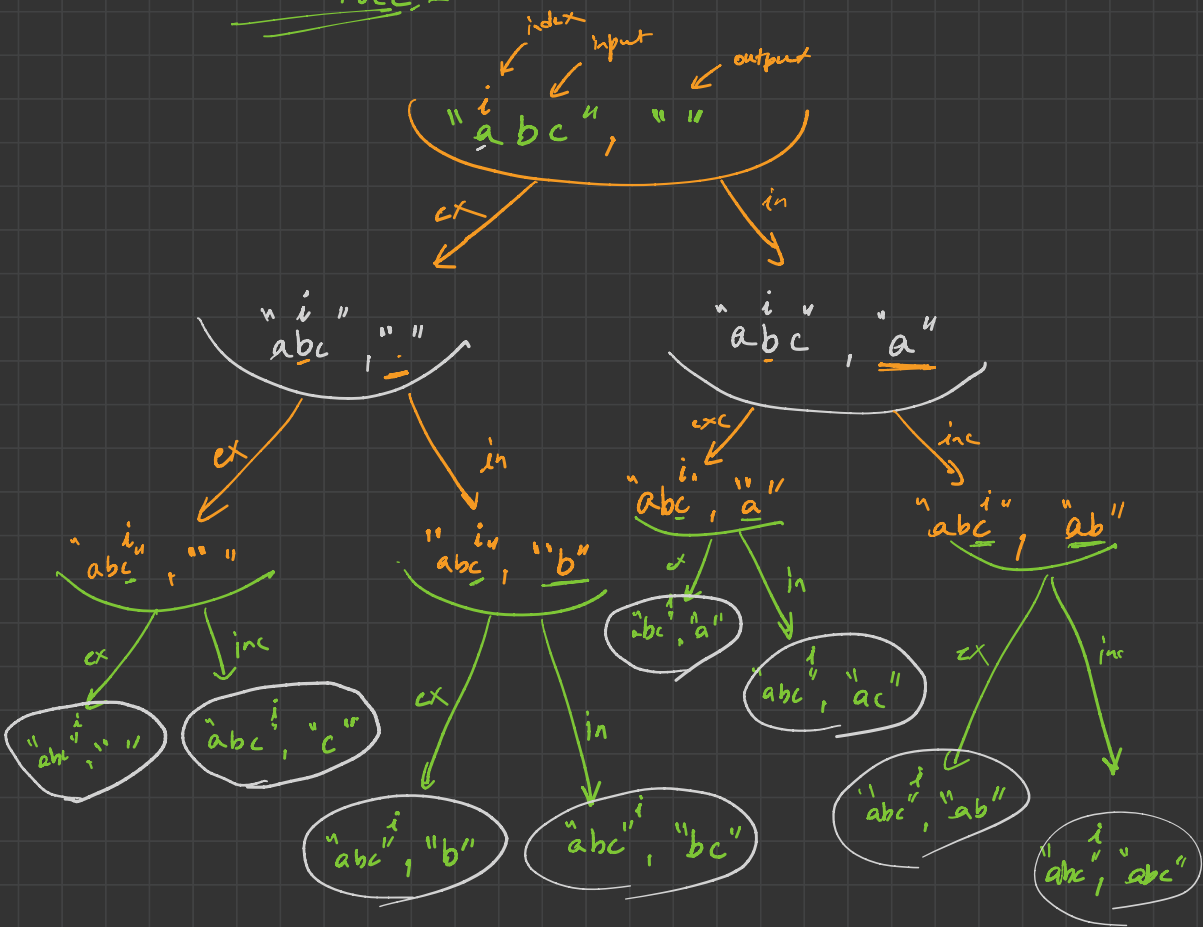
~~a~~ ~~bc~~ " "

2ⁿ ←

bc
ac
ab
a
b
c
abc
" "

→ Subsequences

Recursion Tree:-



→ Subset / Subsequence

H/v → Bits manipulation