

Subsequence

$\rightarrow [a, b, c]$

$\begin{matrix} \checkmark a \\ b \\ \cancel{c} \\ \cancel{ab} \\ \cancel{ac} \\ \cancel{bc} \\ \cancel{abc} \end{matrix}$

\rightarrow empty

\rightarrow empty

(8)

[a, b, c, d]

a
b

b c d

b d

c

c d

a b

a b c d

a c

a b d

a d

a b c

a c d

/ z

How many?

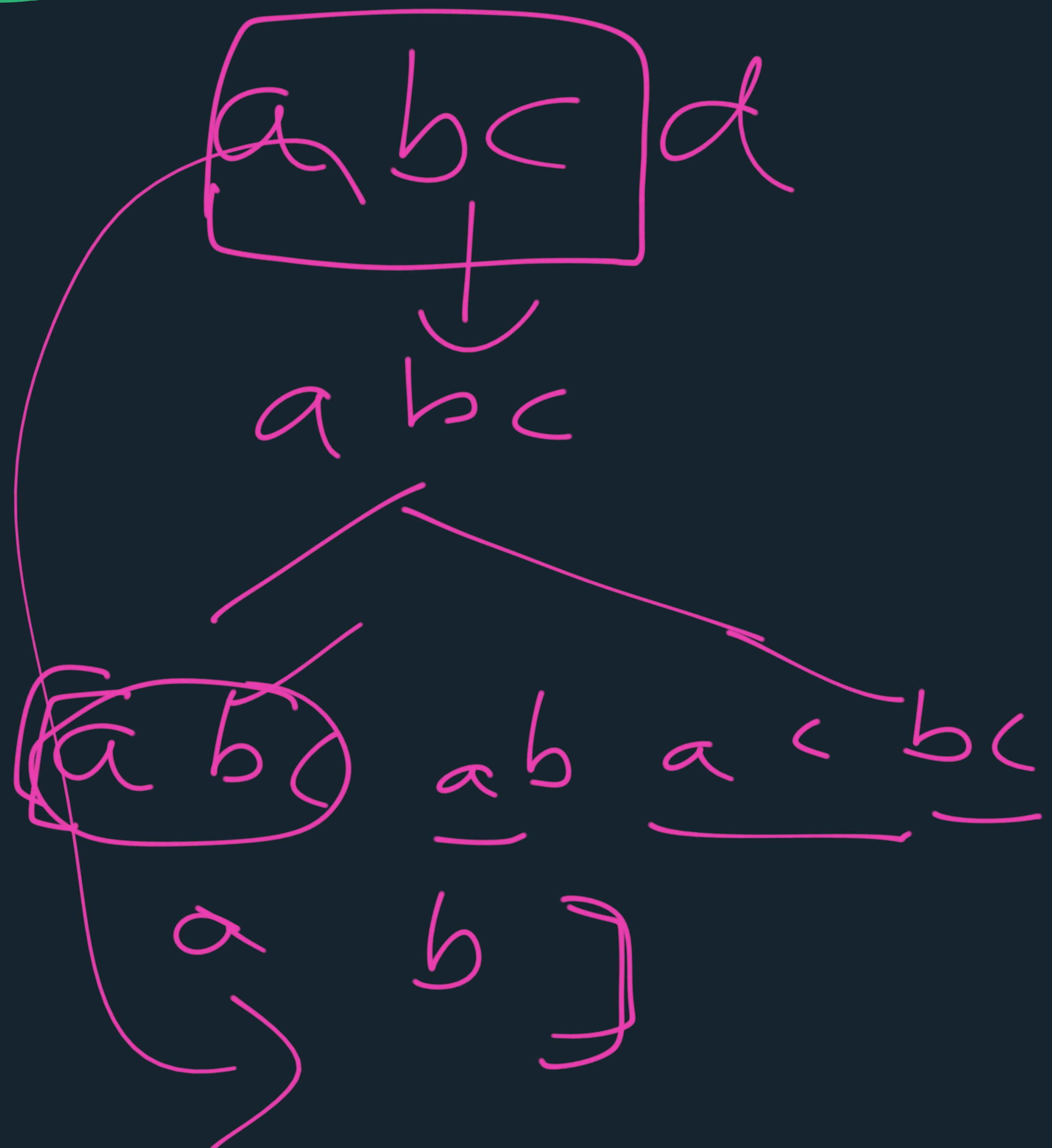
length $\rightarrow n$

No. of Subsequences

$$= 2^n$$

$$n = 3, \quad 2^3 = 8$$

a b c \Rightarrow (a b c)



$S = "abc"$ $\rightarrow 2^3 = 8$

G

$$\text{bits} \rightarrow 2^n = 8$$

