

Permutation of a string

29 June 2023 21:06

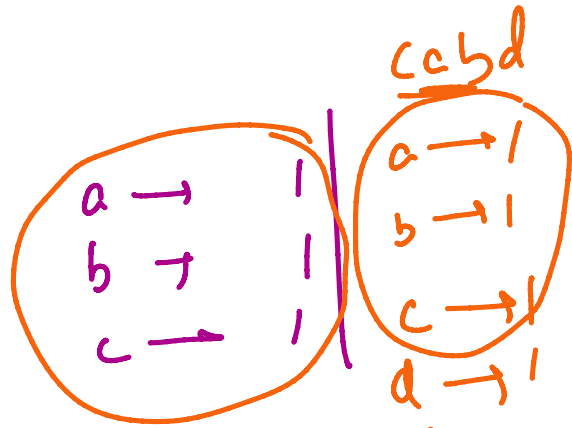
$$n! \rightarrow 3! = 3 \times 2 \times 1 = 6$$

str = "abc"

abc, acb, bac, bca,
cab, cba

str1 = "abc"

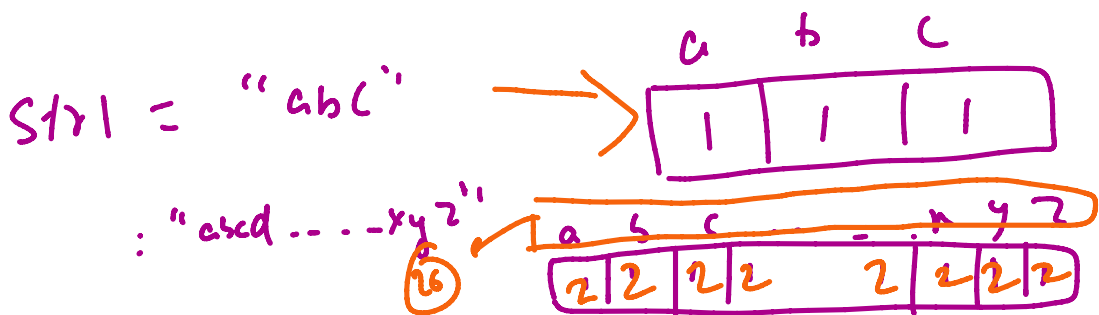
str2 = "cab"



'if content of str1 == content of str2'

frequency Array → to know the content of an array

str1 & str2 will only consist of lowercase alphabets ('a' - 'z')



str1 = "cabcd...xyz"

str1 = "abc"
 → int freqstr1[26] = { 0, ... } | str1[i]

str1:

→ int freqstr1[26] = {0};

for (int i = 0; i < length(str1); i++)

{ freqstr1[str1[i] - 'a'] ++;

str1[i]
a
b
c

1
2
3

a b c ... z
0 1 2 ... 25
1 1 1

'b' - 'a' = 1
98 - 97 = 1

0 1 2 ... 25 → Str1

str2 = "cab"

freqstr2[26] = {0};

for (int i = 0; i < len(str2); i++)
{ freqstr2[str2[i] - 'a'] ++;

"cab"
str2[i]
c
a
b

i = 0 + 1 + 2 + 3

'c' - 'a' = 2
99 - 97 = 2
a - a = 0
b - a = 1

a b c ... z
0 1 2 ... 25
1 1 1

freqstr2