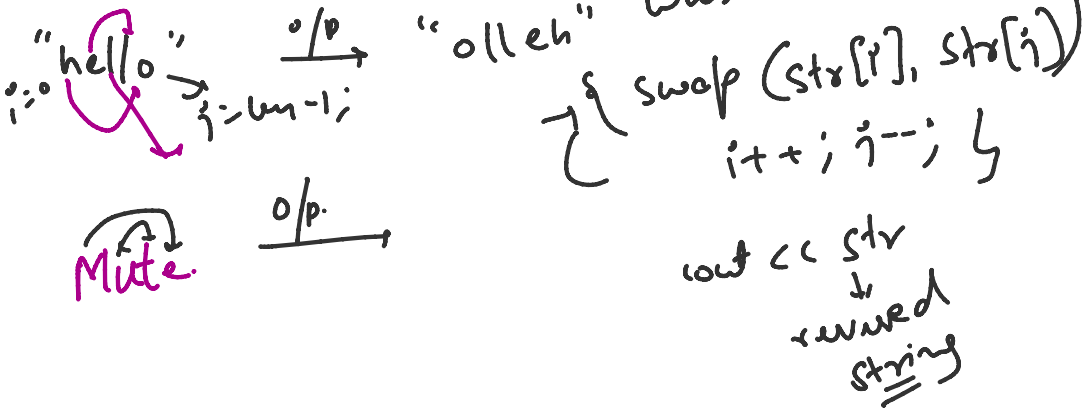
Reverse a string

30 June 2023 20:21



Permutation :- It means the content of two strings are same. ('a'-'z')

str = "abc"

using the values given in the string how many diff. words/strings we can form.

a=1
b=1
c=1

{ "abc", "acb", "bac", "bca", "cab", "cba" } permutations of (abc)

a=1
b=1
c=1

If I have 'n' unique characters in my string → I can have n! permutations

---

str1 "abcd"

str2 "dcab"

str1: "abc---xyz"

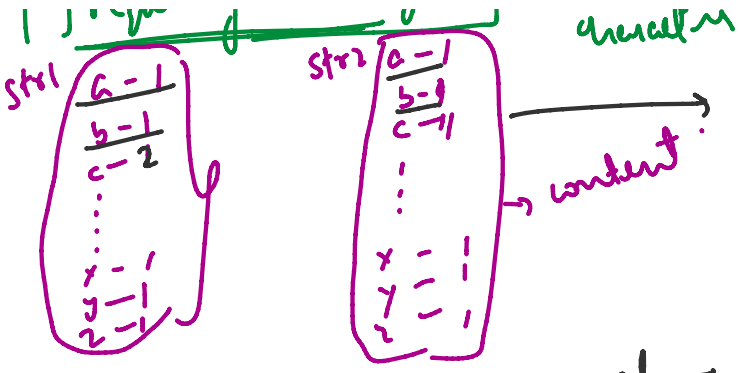
str2: "abc---xyz"

frequency array → keep count of each occurence of characters

str1 a-1

str2 a-1 b-1

→ Not permutation



If they all are equal → they are perm. of each other.

str1 = "aabbcc ..... xxyyzz" = (52)

str1 = "abcd"
0 1 2 3

str2 = "dcab"

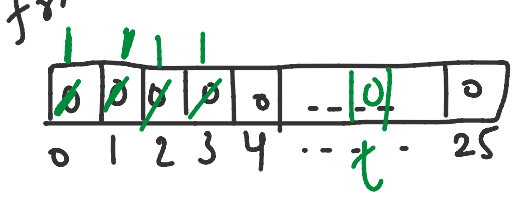
i = 0 1 2 3

```
for(int i=0; i< len(str1); i++)
{
    freqArr[str1[i] - 'a']++;
}
```

str1[i]
a
b

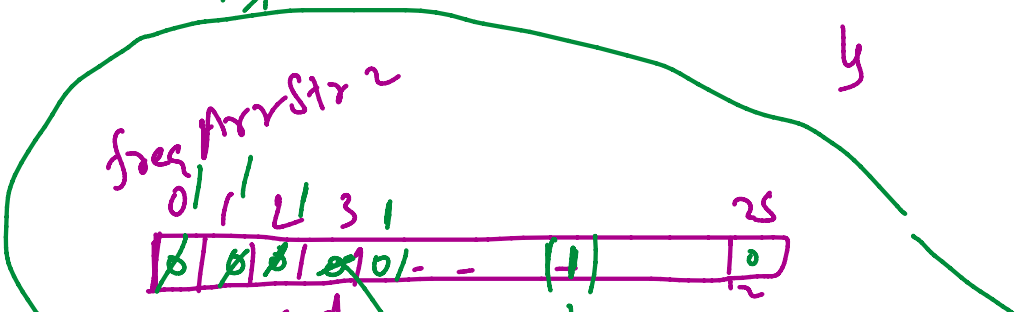
'b' - 'a' = 1

98 - 97 = 1



"dcabt"

i = 0 1 2

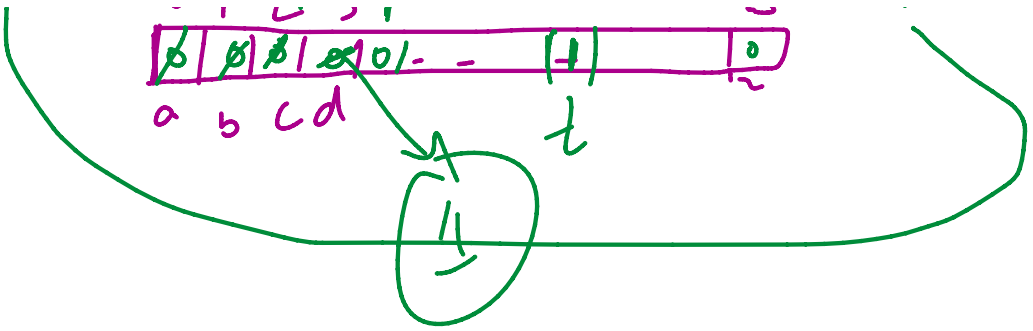



```
for(int i=0; i< len(str2); i++)
{
    freqArr2[str2[i] - 'a']++;
}
```

'd' - 'c' = 100 = (3)

c - a = (2)

'a' - 'c'



'a' - 'c'

What is a substring?

("contiguous part of a string"

"abcd" → 0: "a", "ab", "abc", "abcd"
1: "b", "bc", "bcd"
2: "c", "cd"
3: "d"

outer loop for substring starting at a particular index. → i = 0 to len(str)

Nested loop will be for extension of each substring

```
for (int i=i; j<n; j++)
{ for (int k=i; k<=j; k++)
  { cout<<str[k]
  }
  cout<<"\t"
```