

C++ Strings 2

Lecture- 18

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Warmup Problem : Input a string and return the number of times the neighbouring characters are different from each other.

`String str = "a b b c d e f f g h h";`

`count = 1 2 3 4 5`

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* Sorting a string using in-built function

Sort \rightarrow ascii values ke
order me sort karke
de dega

```
string s = "name";
```

```
sort(s.begin(), s.end());
```

s \rightarrow a e m n

Ques : Given two strings s and t, return true if t is an **anagram** of s, and false otherwise. *leet code → 242*

↓
Sorting → builtin

Input : s = physicswallah, t = wallahphysics

Output: YES

abc cab
↔
anagrams

Ques : Given ^a ~~n~~ strings ~~s~~ consisting of lowercase English alphabets. Print the character that is occurring most number of times. Extra Space → 26 size

String s = "leetcode";

maxCount = 0; ^{constant} space

Special array → int arr[26]

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
0	0	1	1	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Stringstream class

```
String s = "Raghav is a maths teacher";
```

↓

Q is to calculate the no. of words

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Ques : Given a sentence, split every single word of the sentence and print in a new line.

Already done

```
string s;
```

```
getline(cin,s);
```

```
string temp;
```

```
stringstream ss(s);
```

```
while (ss >> temp)
```

```
    cout << temp << endl;
```

Ques : Given a sentence 'str', return the word that is occurring most number of times in that sentence.

```
string str = "Raghav is a maths teacher. He is a DSA  
mentor as well"
```

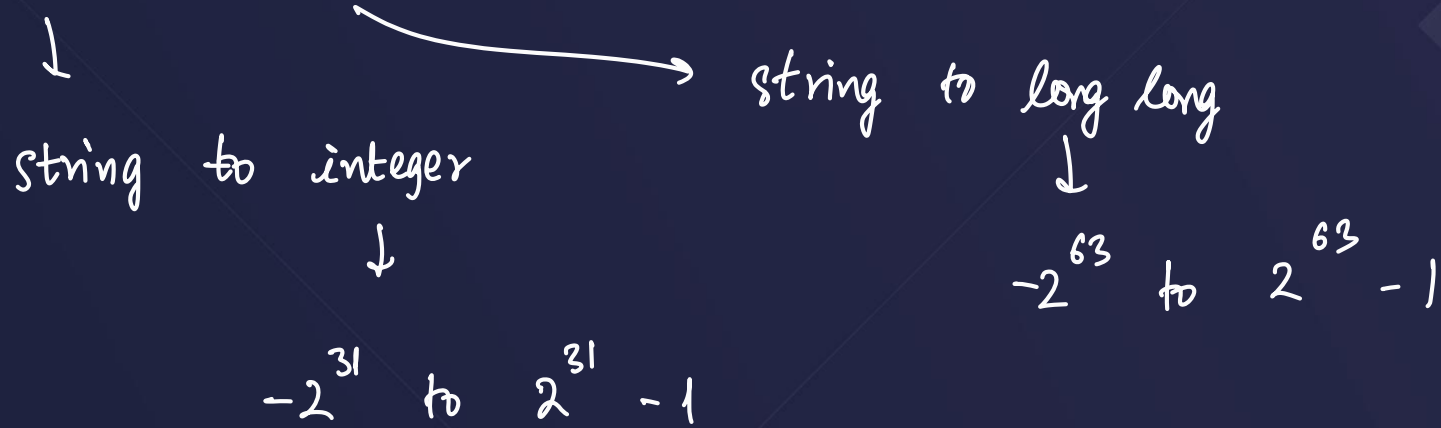
```
vector<string> v;
```

```
maxCount = 0
```

```
count = 0 1 2 1 2  
1 1 1 1
```

```
v = { "DSA", "He", "a", "a", "as", "is", "is", "maths", "mentor",  
      "raghav", "teacher", "well!" }
```


stoi vs stoll built-in functions



→ vector
Ques : Given n strings consisting of digits from 0 to 9. Return the index of string which has maximum value. (Take 0 based indexing)

Input : 0123, 0023, 456, 00182, 940, 2901

Output: 5

$v = ["0123", "0023", "456", "00182", "940", "2901"]$

***Ques** : Input n strings and write a program to find the longest common prefix string of all the strings.

strs = ["dog", "racecar", "car"]

→ ["car", "dog", "racecar"]

Ques : Input n strings and write a program to find the longest common prefix string of all the strings.

[LeetCode - 14]

strs = ["flower", "flow", "flight"]

* **Ques** : Given two strings s and t, determine if they are isomorphic. [leetcode 205]

s = "egg" t = "add" true

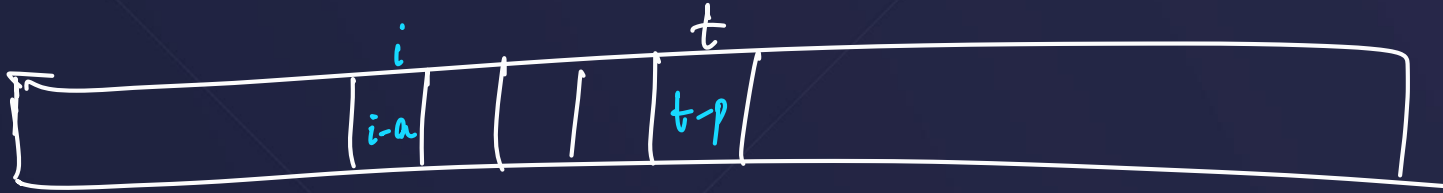
s = "foo" t = "bar" false

s = "paper" t = "title" true

Hint : Special array

Ques : Given two strings s and t , determine if they are isomorphic.

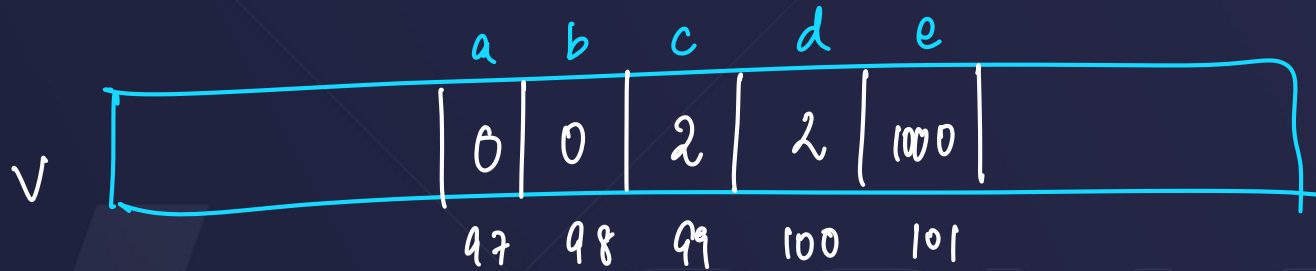
$s = \text{"title"}$ $t = \text{"paper"}$



* **Ques** : Given two strings s and t, determine if they are isomorphic. [LeetCode - 205]

s = "b a d c"

t = "b a b a"



Thank you!

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