1) Pace ↑

2) No Backlogs

Strings

In Java

Contents

character Array

```
char[] arr = {'r', 'a', 'g', 'h', 'a', 'v'};

sout(arr[3]);
```

strings

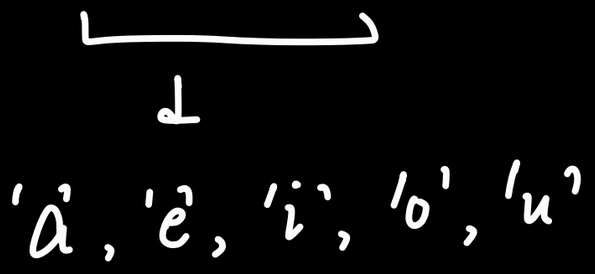
String as a data type

String Data Type

charAt() & length()

```
                0 1 2 3 4  5 6 7 8 9 10 11 12 13 14    19
String  s  =  "Chaitanya and Shruti ";

sout( s.charAt(4));   // s[4]

int n =  s.length();
```

Ques: Count the number of vowels in a given string



Ques: Palindrome String

O(n)

mom

dad

racecar

malayalam

naman

markram

nitin

abccba

racecar

i j

indexOf() & compareTo()

```
s1.compareTo(s2);
```

↓

integer

lexographically smaller

raghav < sneha

harmeet < harsh

harsh harshit

Raghav < aditya

contains() & startsWith()

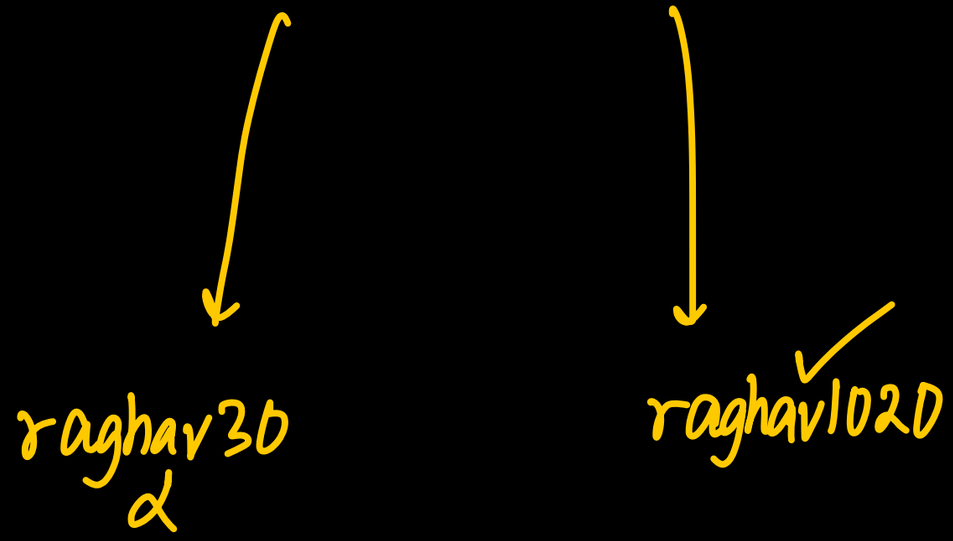
toLowerCase() & concat()

Ques: Change the string

String + int/char/String

sout("raghav"+10+20)

left to right




```
sout (10 + 20 + "raghav");

sout (10 + "raghav" + 20);
```

Ques: Take integer input and convert it into a string

Ques: Digits in a given number

substring(i) & substring(i,j)

Ques: Print all substrings

Array to String

S = "gopi"

g , go , gop , gopi

o , op , opi

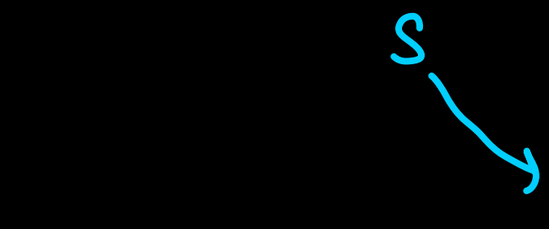
p , pi

i

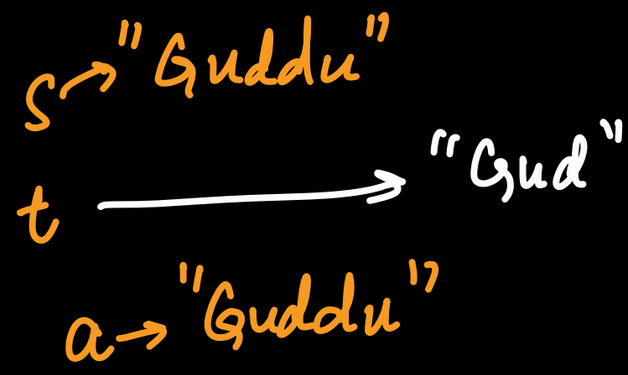
HW: Sum of all substrings of a number

Interning & new keyword

```
String s = "raghar";

s = "Harsh";
```

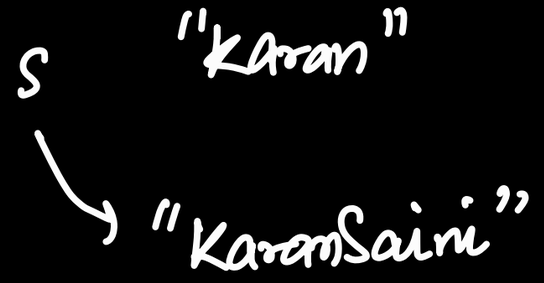


```
String s = "Guddu";

String t = "Guddu";

t = "Gud"

String a = new String("Guddu");
```



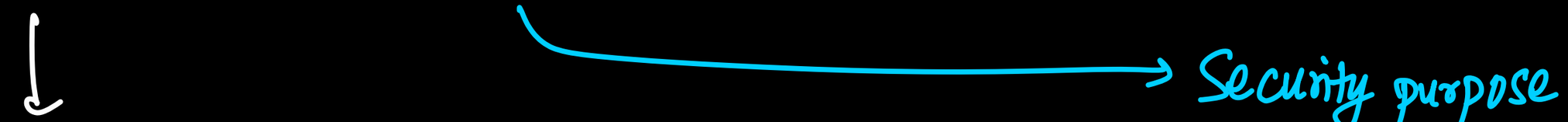
Interning & new keyword

```
String s = "Karan";

s += "Saini";
```




```
t = "";
t += 'r';
t += 'a';
t += 'g'
```

String immutability in Java



cannot change individual characters

```
0 1 2 3 4 5
s = "Bishal";
```

```
s = s.substring(0,3) + 'm' + s.substring(4);
```

s1.equals(s2)

```
String s1 = "Raghav";
String s2 = new String("Raghav");

Sout ( s1 == s2 );
```

↓

false

StringBuilder

setCharAt()

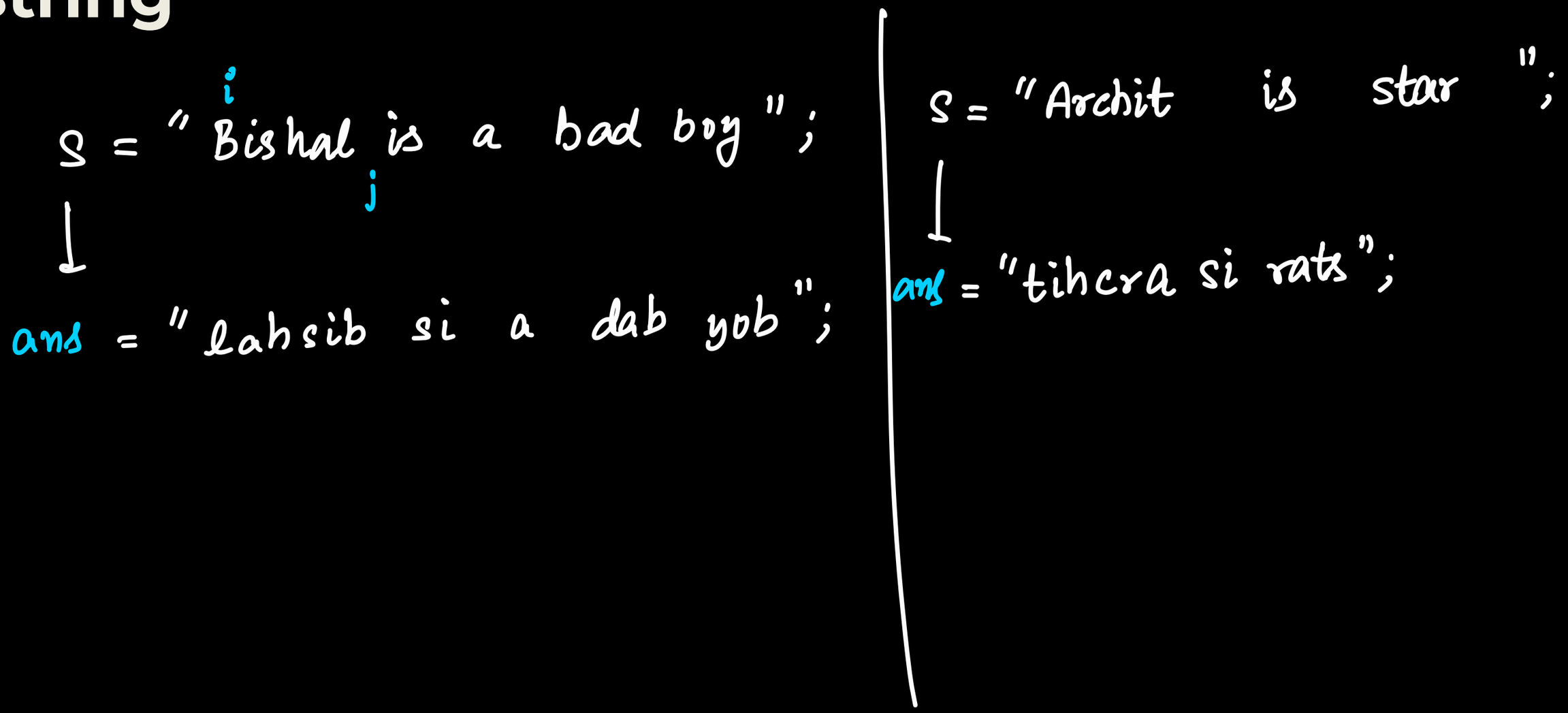
Ques: Toggle Characters

s1.append(s2)

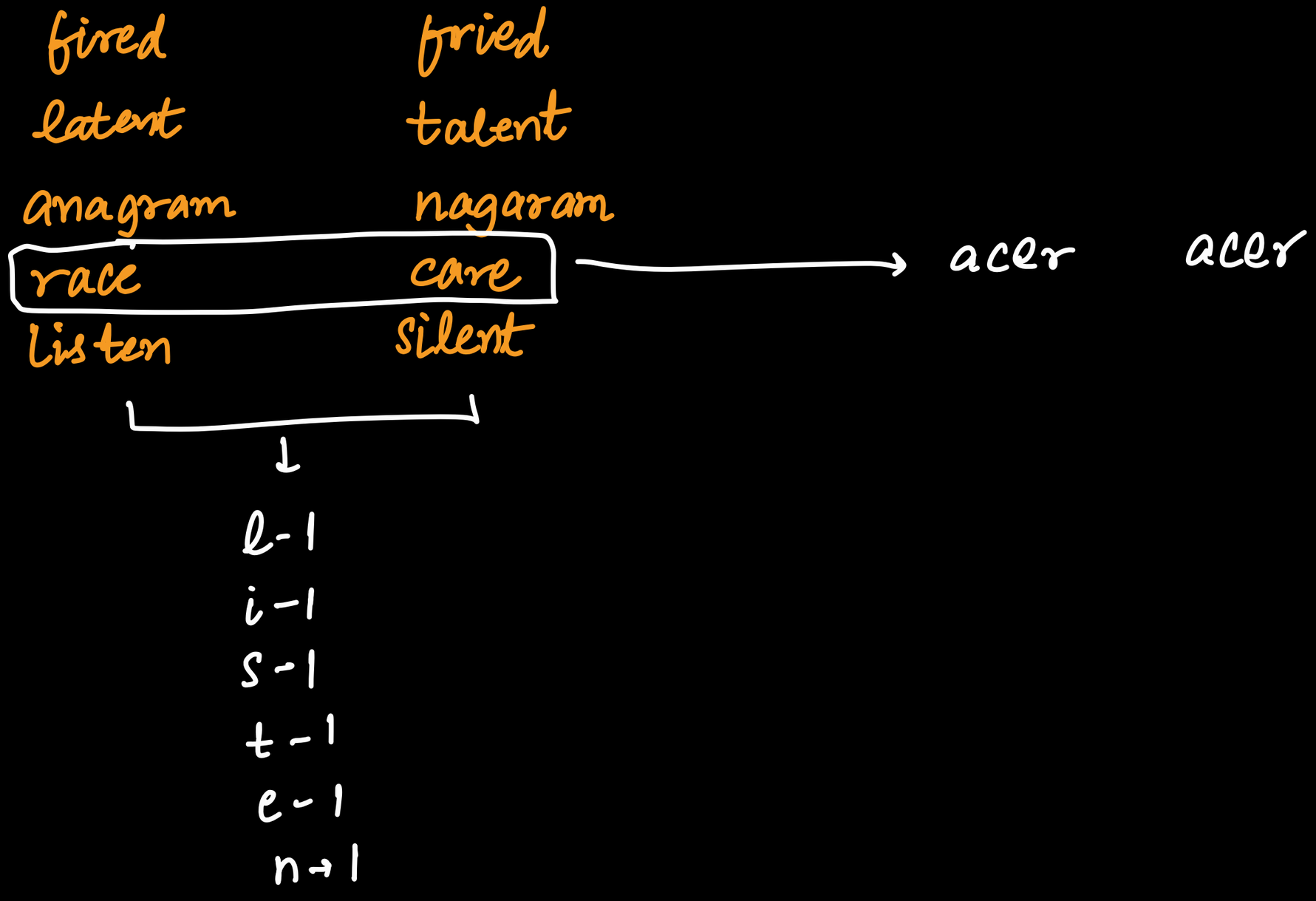
insert() & deleteCharAt()

reverse()

Ques: Reverse each word in a given string



Ques: Anagram



Ques: Most frequent character

String s = "character";

c - 2
a - 2
r - 2

Method-1 : Brute Force

T.C. = $O(n^2)$ "Nested Loop"

Method-2 : Sorting T.C. = $O(n \log n)$

s = "aaccehrrt";

Sliding Window

Ques: Most frequent character

s = " a a c c e t t t z z z z "

i

j

maxFreq = 1 2 3 4

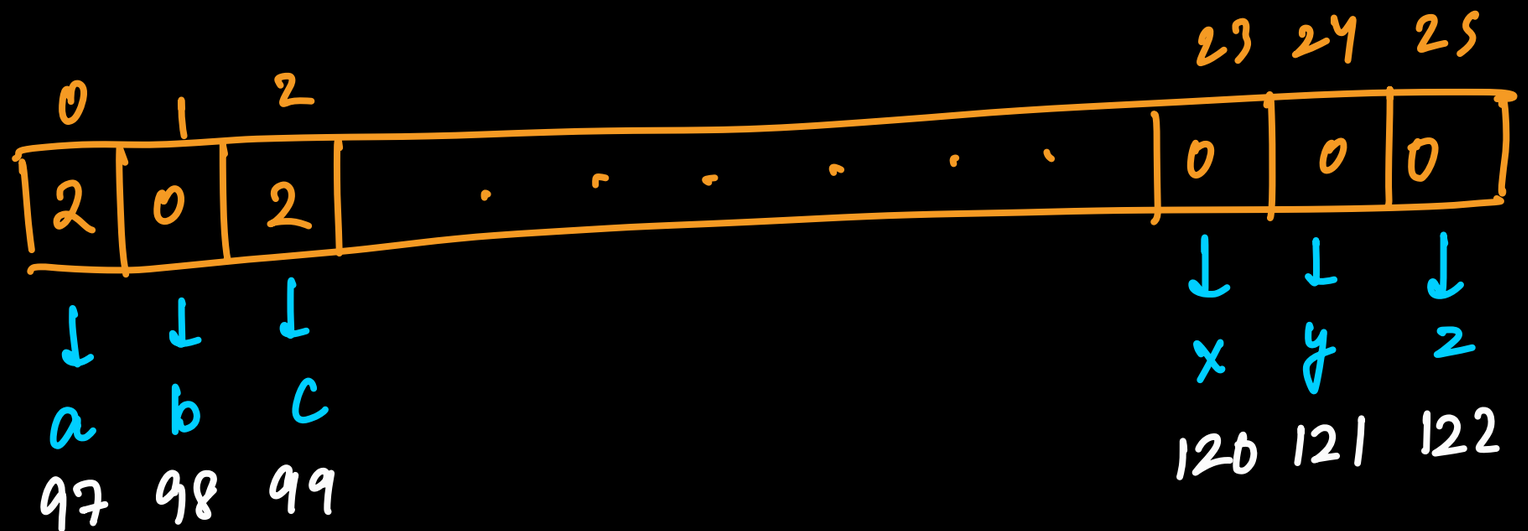
ans = a a t z

Ques: Most frequent character

Method-3 : Frequency array.

S = character

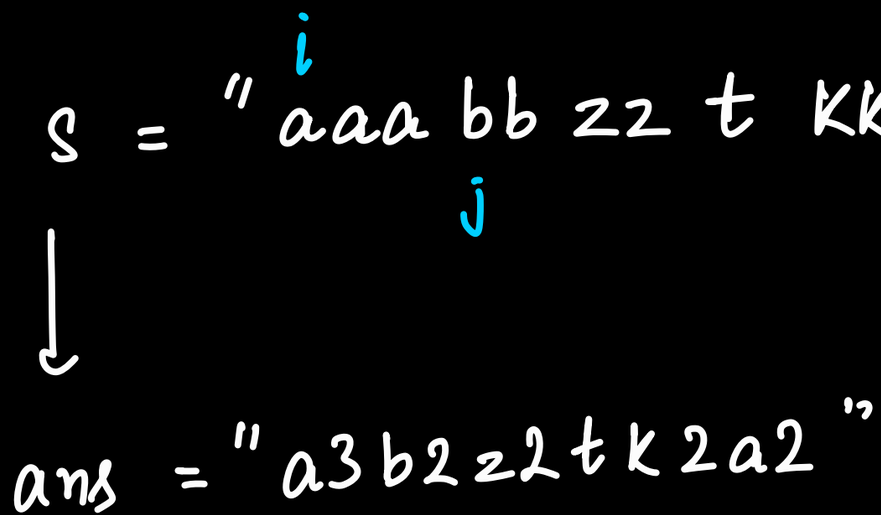
freq =



A.S. = O(1) T.C. = O(n)

HW: Non repeating character

Ques: String Compression [leetcode]



HW: Easy String

Ques: Roman number to Integer

THANKYOU

Cuties