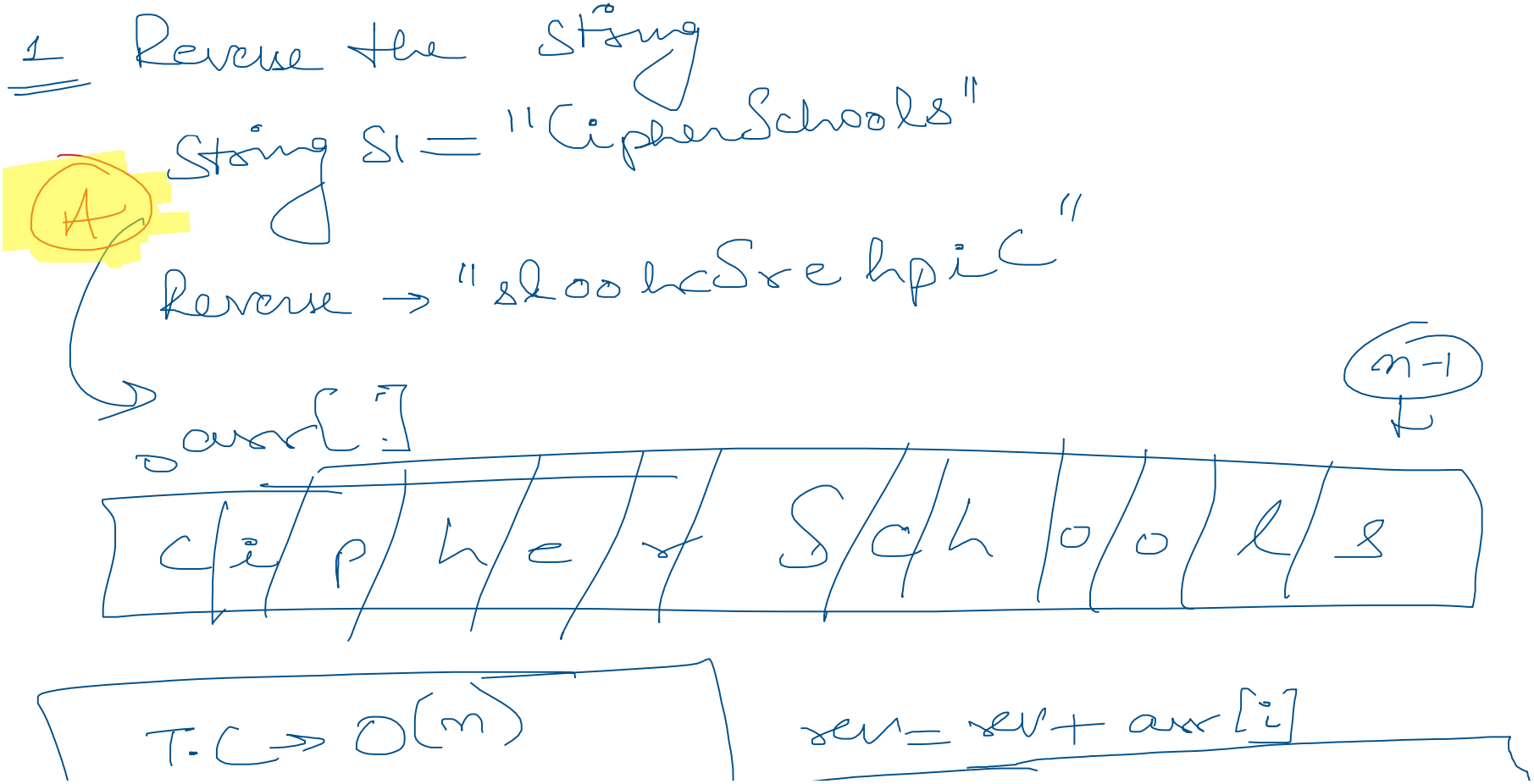
July - 16

16 July 2020 17:40

1. **Reverse a String**
2. **Check if a String is Palindrome in Java**
3. **Check if Two strings are Anagrams of Each other(Frequency Array Concept)**
4. **Check if two strings are rotations of each other**

Tasks:

A. **Practice all the above questions**
B. **Practice String Questions from GFG**
C. **https://practice.geeksforgeeks.org/problems/check-if-string-is-rotated-by-two-places/0**
D. **https://practice.geeksforgeeks.org/problems/anagram/0**



SC => O(n)

rev = "s"
rev = "se"
.
.
rev = "sloohcS relpiC"

B) for(S.length()-1; 0 ; --)
{ charAt (i)

}

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

Good Solution

h e l l o

2pointer approach

l r

| l | e | e | o |

Time → $O(\frac{n}{2})$ → $O(n)$

2 Check if a string is Palindrome

ARORA

Palindrome

MALAYALAM

(or)

ARORA

No

Cipher

3 Anagrams

String 1 | String 2 | Anagram

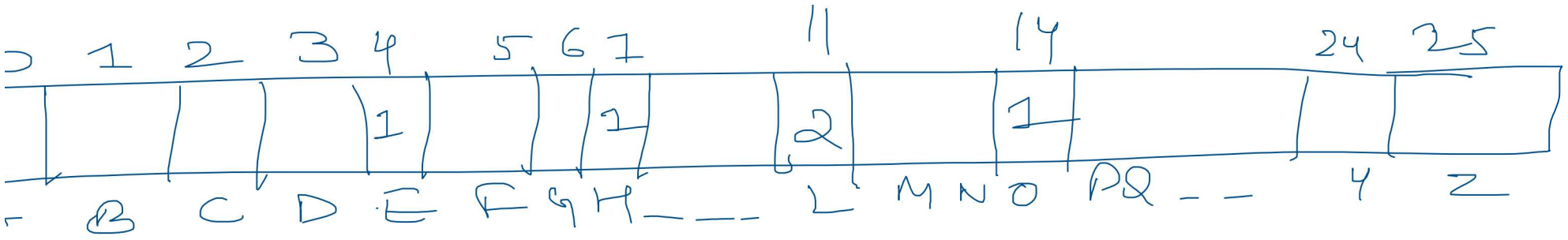
LISTEN	SILENT	Yes
GOOD	GOD	No
TRIANGLE	INTEGRAL	Yes

Subquestion → Count the freq of letters in a string.

S → HELLO

H → 1
E → 1
L → 2
O → 1

Z → 25

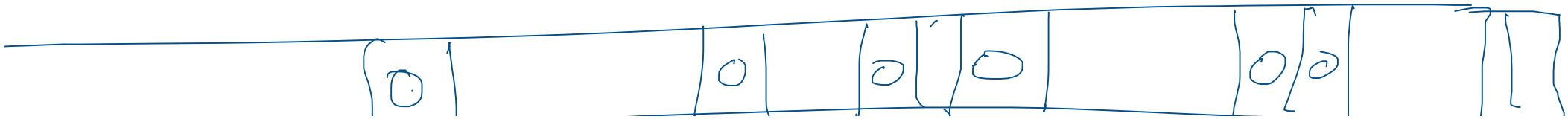


We calculated freq Arrays of Both Strings and compared them

So we really need 2 Freq Arrays ??

S1 → LISTEN

S2 → SILENT

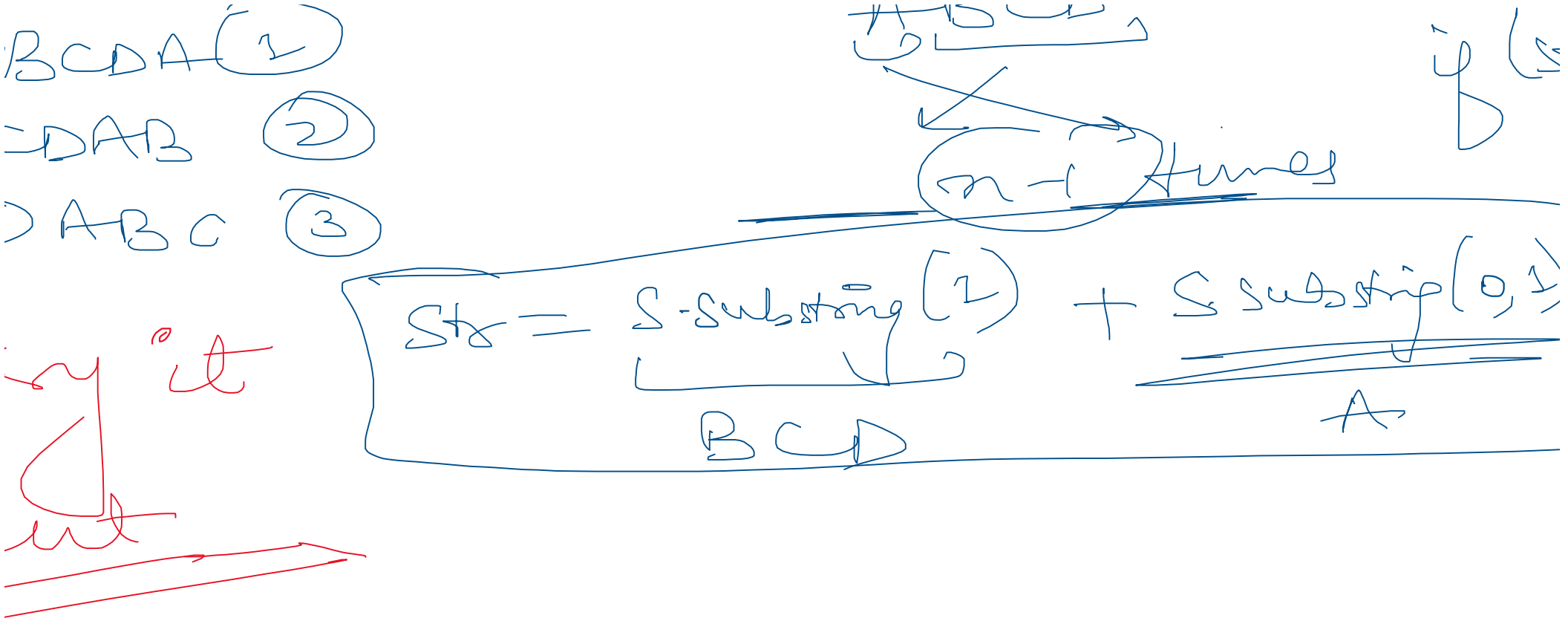


A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Check if 2 strings are rotations of e

String S1 → "ABCD"
String S2 → "CDAB"
→ True

String S1 → "ABCD"
String S2 → "ACBD"
→ false



S1
ABCD

S2
CDBA

Approach1 → length()

Approach2 → Str = S1 + S1

=> ABCD ABCD

```
if (str.contains(s2))
    return true
return false;
```