

## HASHING QUESTIONS

Question 1 :

### **Bottom View of a Binary Tree**

The top view of a binary tree is the set of nodes visible when the tree is viewed from the top. Given a binary tree, print the top view of it. The output nodes can be printed in any order.

**Sample Input :**

```
20
 / \
8   22
/ \   \
5   3   25
/ \
10  14
```

**Sample Output :** 5 10 3 14 25

**Hint :** Use the concept of Vertical Order

Question 2 :

### **Two Sum**

Given an array of integers arr[ ] and an integer target, return indices of the two numbers such that they add up to target.

You may assume that each input would have exactly one solution, and you may not use the same element twice.

You can return the answer in any order.

**Sample Input 1 :** arr = [2, 7, 11, 15], target = 9

**Sample Output 1 :** [0, 1]

As arr[0] + arr[1] == 9, we return [0, 1].

**Sample Input 2 :** arr = [3,2,4], target = 6

**Sample Output 2 :** [1, 2]

Question 3 :

### **Sort by Frequency**

er.dm.zer03@gmail.com

Given a string s, sort it in decreasing order based on the frequency of the characters. The frequency of a character is the number of times it appears in the string.

Return the sorted string. If there are multiple answers, return any of them.

**Sample Input 1 :** s = "cccaaa"

**Sample Output 1 :** "aaaccc"

Both 'c' and 'a' appear three times, so both "cccaaa" and "aaaccc" are valid answers.

Note that "cacaca" is incorrect, as the same characters must be together.

**Sample Input 2 :** s = "tree"

**Sample Output 2 :** "eert"

'e' appears twice while 'r' and 't' both appear once.

So 'e' must appear before both 'r' and 't'. Therefore "eetr" is also a valid answer.

### **BONUS (LRU Cache) !IMPORTANT**

Please go on the platform and solve this question : <https://leetcode.com/problems/lru-cache/>

