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Domain Winning Camp Worksheet (Practice Questions)
Subject: IT

Day 3

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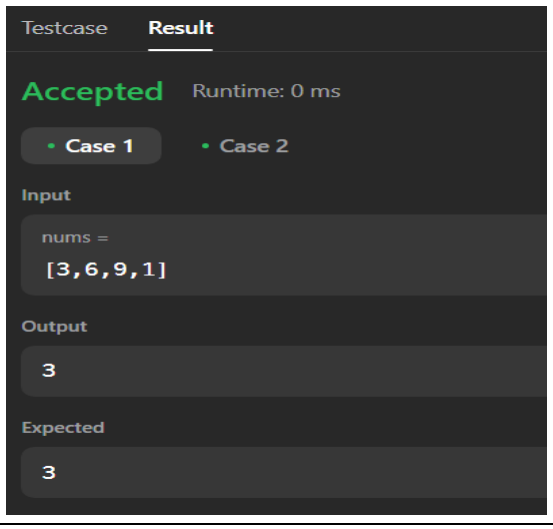
SECTION/GROUP: DWWC-43	**SUBJECT:** IT
DATE: 05/01/2023	**BRANCH:** CSE

Que-1: [Maximum Gap]

Code:

```
class Solution {
public:
    int maximumGap(vector<int>& nums) {
        sort(nums.begin(), nums.end());
        int ans=0;
        for(int i=0;i<nums.size()-1;i++){
            if(ans<(nums[i+1]-nums[i])){
                ans=nums[i+1]-nums[i];
            }
        }
        return ans;
    }
};
```

Output:



Que-2: Sort Colors

Code:

```
class Solution {
public:
    void sortColors(vector<int>& nums) {int
        start=0;
        int end=nums.size()-1;
        int i=0; while(i<=end){
            if(nums[i]==0){
                int temp=nums[i];
                nums[i]=nums[start];
                nums[start]=temp; start++;
                i++;
            }
            else if(nums[i]==2){ int
                temp=nums[i];
                nums[i]=nums[end];
                nums[end]=temp;
                end--;
            }
            else{i++;}
        }
    }
};
```

Output:

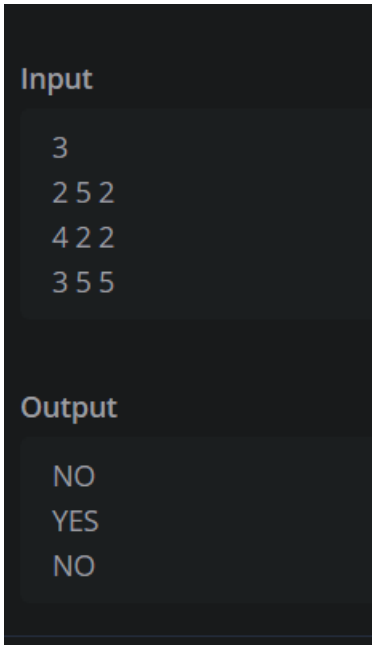
Que-3: Chef and Lockout Draws

Code:

```
#include <iostream>
using namespace std;

int main() {
	int t;
	cin>>t;
	while(t--){
	   int a,b,c;
	   cin>>a;
	   cin>>b;
	   cin>>c;
	   if(a>b and a>c){
	      if(a==b+c){
	         cout<<"YES"<<endl;
	      }
	      else{
	         cout<<"NO"<<endl;
	      }
	   }
	   else if(b>a and b>c){
	      if(b==a+c){
	         cout<<"YES"<<endl;
	      }
	      else{
	         cout<<"NO"<<endl;
	      }
	   }
	   else{
	      if(c==a+b){
	         cout<<"YES"<<endl;
	      }
	      else{
	         cout<<"NO"<<endl;
	      }
	   }
	}
```

Output:



Que-4: Turbo Sort

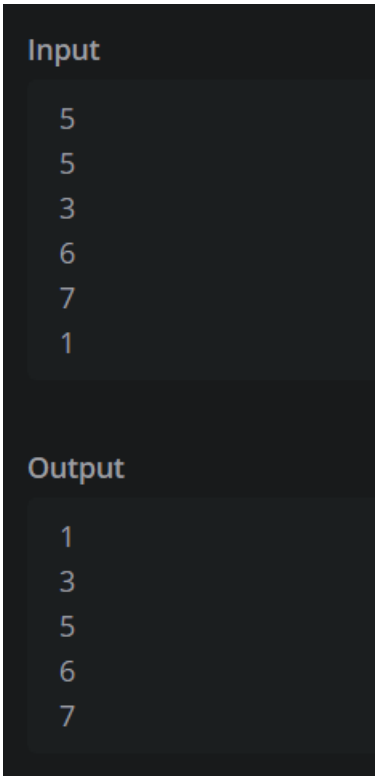
Code:

```
#include <bits/stdc++.h>

using namespace std;

int main() {
        // your code goes here
        int t;
        cin>>t;
        vector <int> a(t); for(int
        i = 0; i< t ; i++){
            cin>>a[i];
        }
        sort(a.begin(),a.end());for(int x
        : a)
            cout<<x<<endl;
        return 0;
}
```

Output:



Que-5: [Reorder Data in Log Files]

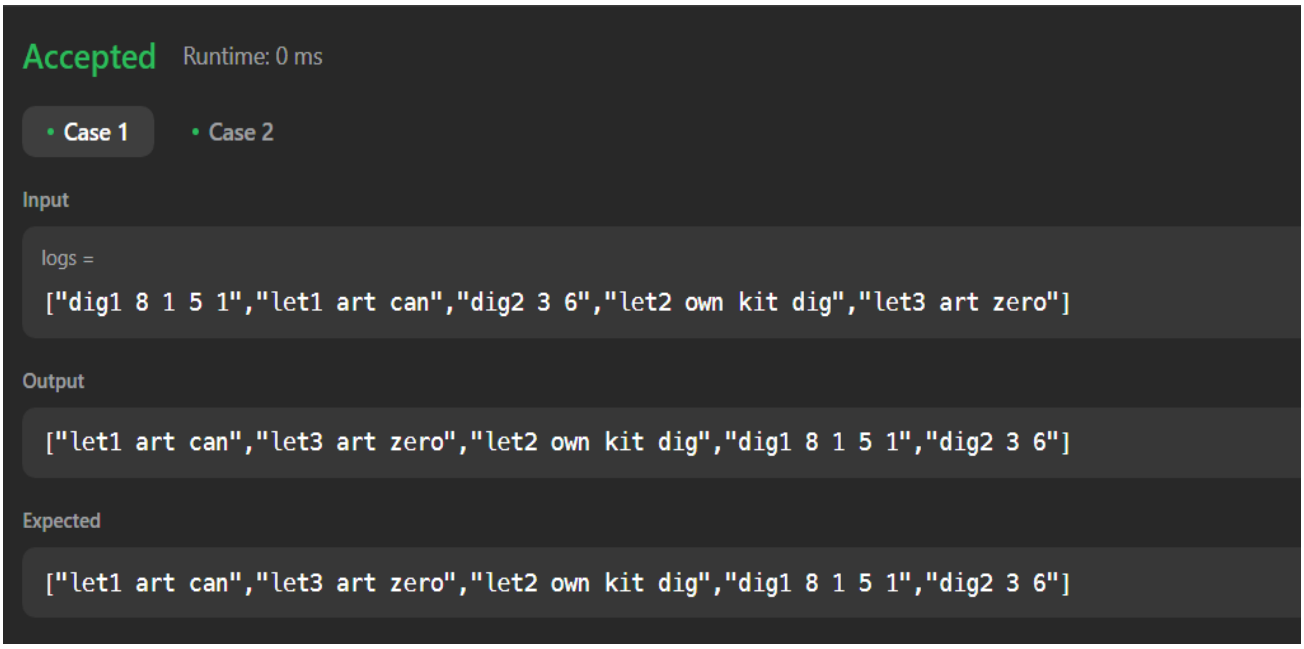
Code:

```
class Solution {
public:
    vector<string> reorderLogFiles(vector<string>& logs) {
        auto it = stable_partition(logs.begin(), logs.end(), [](const string& str) {
            return isalpha(str[str.find(' ') + 1]);
        });

        sort(logs.begin(), it, [](const string& str1, const string& str2) {auto
            substr1 = string(str1.begin() + str1.find(' '), str1.end()); auto
            substr2 = string(str2.begin() + str2.find(' '), str2.end()); return
            (substr1 == substr2) ? str1 < str2 : substr1 < substr2;
        });

        return logs;
    }
};
```

Output:


Accepted
Runtime: 0 ms
Case 1
Case 2
Input
logs =
["dig1 8 1 5 1","let1 art can","dig2 3 6","let2 own kit dig","let3 art zero"]
Output
["let1 art can","let3 art zero","let2 own kit dig","dig1 8 1 5 1","dig2 3 6"]
Expected
["let1 art can","let3 art zero","let2 own kit dig","dig1 8 1 5 1","dig2 3 6"]