

IT SKILLS (Domain Camp) WORKSHEET – 3

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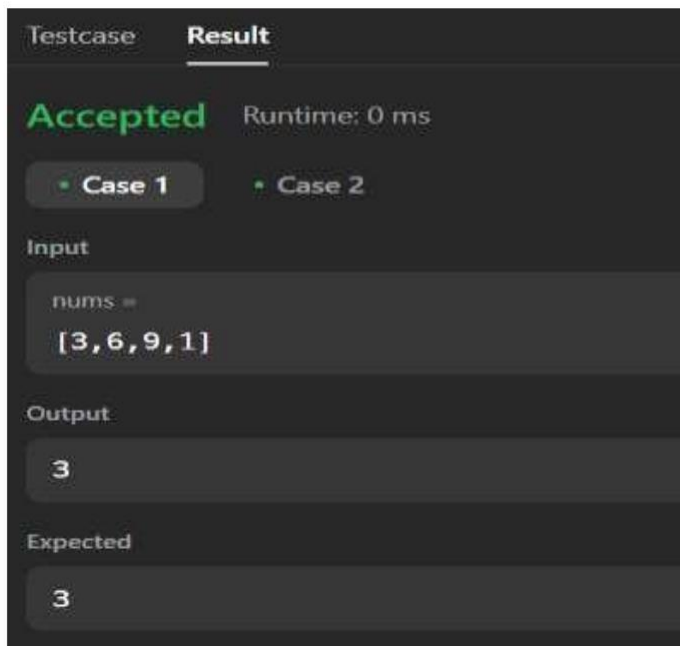
Que-1: Maximum Gap

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<(nu  
    ms[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:

Accepted

Runtime: 0 ms

• Case 1

• Case 2

Input

nums =
[2,0,2,1,1,0]

Output

[0,0,1,1,2,2]

Expected

[0,0,1,1,2,2]

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<<"YE S"<<endl;  
        }  
        else{  
            cout<<"NO"<<endl;  
        }  
    }  
}
```

}

Output:

```
Input
3
2 5 2
4 2 2
3 5 5

Output
NO
YES
NO
```

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:

```
Input
5
5
3
6
7
1

Output
1
3
5
6
7
```

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"]
```