



WORKSHEET 3

Student Name: Jannat Baweja UID: 20BCS2050

DOMAIN CAMP: 03-01-2023 to 14-01-2023 **Section/Group:** DWWC-43

Subject Name: IT Skills (DSA)

Question 1. CHEF AND LOCKOUT DRAWS

```
Language: C++14
     1 #include <iostream>
        using namespace std;
        int main() {
               int A,B,C;
               for(int i=0;i<T;i++)
11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

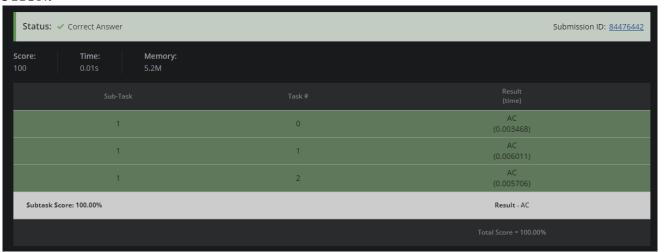
26

27

28

29

30
                    if(A==(B+C))
                          cout<<"YES"<<endl;</pre>
                    else if(B==(A+C))
                          cout<<"YES"<<endl;</pre>
                    else if(C==(A+B))
                          cout<<"YES"<<endl;</pre>
                          cout<<"NO"<<endl;</pre>
               }
// your code goes here
               return 0;
```









Question 2. CHEF AND PATIENTS

```
Language: C++14
 1 #include <bits/stdc++.h>
 2 using namespace std;
 4 void solve() {
        int n ; cin >> n;
 6
         vector<pair<int, int>> a(n);
         int mx = 0;
         for(int i=0; i<n; i++) {
 8 -
             a[i].second = i;
             cin >> a[i].first;
10
11
             mx = max(mx, a[i].first);
12
13
         for(int i=0; i < n; i++) a[i].first = mx - a[i].first;
14
15
         sort(a.begin(), a.end());
         vector<int> ans(n);
16
17
         for(int i=0; i<n; i++) ans[a[i].second] = i+1;</pre>
18
19
         for(int& e : ans) cout << e << " "; cout << endl;</pre>
20
22
23 - int main() {
24
         int t; cin >> t;
         while(t--) solve();
25
         return 0;
26
```









Question 3. CANDIES

```
Language: C++14
 1 #include <iostream>
 2 #include <climits>
 3 using namespace std;
 5 int main() {
 6
         // your code goes here
         int t;cin>>t;
 8 -
         while(t--){
             int n;cin>>n;
10
             int arr[n];
             for(int i=0;i<n;i++) cin>>arr[i];
11
             int a=INT_MIN , b=INT_MAX;
12
13 -
             for(int i=0;i< n;i++){
14
                  if(arr[i]<b) b=arr[i];</pre>
15
                  if(arr[i]>a) a=arr[i];
16
17
             int diff = a-b;
18
             int count = 0;
19
             for(int i=0;i< n;i++){
20
                 if(diff==arr[i]) count++;
             if(count>0) cout<<diff<<endl;</pre>
22
             else cout<<"NO"<<endl;</pre>
23
24
26
```

```
Status: ✓ Correct Answer
Submission ID: 84476061

Time:
Memory:

0.00s
5.3M
```







Question 4. CHEF AND PARTY

```
Language: C++14
 1 #include <bits/stdc++.h>
    using namespace std;
    int main()
 4 - {
         int t;
         cin >> t;
 6
         while (t--)
 8 -
 9
10
11
             int *arr = new int[n];
12
             for (int i = 0; i < n; i++)
13 -
                  cin >> arr[i];
14
             sort(arr, arr + n);
16
17
             int ans = 0;
             for (int i = 0; i < n; i++)
18
19
20
                  if (arr[i] <= ans)</pre>
21 -
22
                      ans++;
24
25
             cout << ans << endl;</pre>
26
27
         return 0;
28
29
```

```
Status:
✓ Correct Answer

Submission ID:
84847118

Time:
Memory:

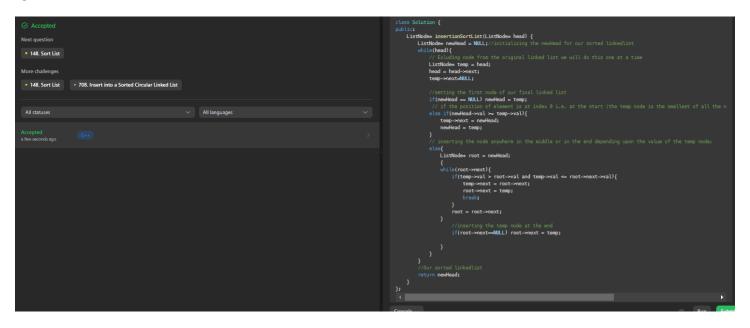
0.18s
7.4M
```







Question 5. INSERTION SORT LIST



Question 6. COLOR SORT

