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Q1. Candies

Code:

```
#include <bits/stdc++.h>
using namespace std;
// INT HERE MEANS LONG LONG
#define int long long
#define endl '\n'
```

```
bool solve(int *arr, int n, int ele)
```

```
{
    int s = 0, e = n-1;
```

```
    while(s<=e)
```

```
    {
        int mid = (s+e)/2;
```

```
        if(arr[mid] == ele)
            return true;
```

```
        else if(arr[mid]<ele)
```

```
        {
            s = mid+1;
```

```
        }
        else
            e = mid-1;
```

```
    }
    return false;
}
```

```
int32_t main(){
    ios_base::sync_with_stdio(false);
    cin.tie(NULL);
```

```
    int t;
```

```
    cin >> t;
```

```
    while (t--){
```

```
        int n;
```

```
        cin>>n;
```

```
        int * candies = new int[n];
```

```
        for(int i = 0; i<n; i++)
```

```

{
    cin>>candies[i];
}

int desired_level = *max_element(candies,candies+n)-*min_element(candies,candies+n);
bool f = false;


for(int i = 0; i<n; i++)
{
    if(candies[i] == desired_level)
    {
        cout<< desired_level<<endl;
        f = true;
        break;
    }
}

if(!f)
    cout<< "NO"<<endl;

}
return 0;
}

```

Output:

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20 / 50


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Status: ✓ Correct Answer
Submission ID: [84626533](#)

Time:
0.00s

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Q2. Chef and patients

Code:

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

using namespace std;

void solve() {
    int n ; cin >> n;

    vector<pair<int, int>> a(n);

    int mx = 0;

    for(int i=0; i<n; i++) {
        a[i].second = i;

        cin >> a[i].first;

        mx = max(mx, a[i].first);
    }

    for(int i=0; i<n; i++) a[i].first = mx - a[i].first;

    sort(a.begin(), a.end());

    vector<int> ans(n);

    for(int i=0; i<n; i++) ans[a[i].second] = i+1;

    for(int& e : ans) cout << e << " "; cout << endl;
}

int main() {
    int ti; cin >> ti;
```

```

while(ti--) solve();

return 0;

}

```


Test against Custom Input

```

6
2 10 3 3 2 10
4
8 9 8 9

```

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21 / 50



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Status: ✓ Correct Answer
Submission ID: [84626721](#)

Time:
0.15s

Q3. Chef and employment test

Code:

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

```
using namespace std;
```

```

int main() {
    int t;
    cin>>t;
    while(t--){
        int n,k;
        cin>>n>>k;

```

```

int arr[n];

for(int i=0;i<n;i++){

    cin>>arr[i];

}

sort(arr,arr+n);

cout<<arr[(n+k)/2]<<endl;

}

return 0;

}

```


Test against Custom Input

```

3
2 1
4 7
4 3

```

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22 / 50



Next Problem

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Status: ✓ Correct Answer
Submission ID: [84626947](#)

Time:
0.01s

Q4. chef and party

Code:

Output:

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


```
using namespace std;
```

```
int main() {  
    // your code goes here  
  
    int t ;  
  
    cin>>t;  
  
    while(t--){  
        int n;  
  
        cin>>n;  
  
        int arr[n];  
  
        for(int i=0;i<n;i++){  
            int a;  
  
            cin>>arr[i];  
  
        }  
  
        int count=0;  
  
        sort(arr,arr+n);  
  
        for(int i=0;i<n;i++){  
            if(arr[i]==0 || arr[i]<=count){  
                count++;  
            }  
        }  
  
        cout<<count<<endl;  
    }  
  
    return 0;  
}
```

3
2
0 0
6


Problem Solver Badge

22 / 50



Next Problem

Solve 28 more problems to get Bronze Badge

Status:  Correct Answer

Submission ID: [84627205](#)

Time:

0.18s

Q5. Frog sort

Code:

```
#include <iostream>

#include<vector>

#include<algorithm>

#include<math.h>

using namespace std;

bool compare(vector<int> &v1,vector<int> &v2){

    return v1[1]<v2[1];

}

int main() {

    int t;

    cin>>t;
```

```

while(t--){

    int n;

    cin>>n;


    vector<vector<int>> v(n,vector<int>(3));

    for(int i=0;i<n;i++)
    {
        v[i][0]=i;
        cin>>v[i][1];

    }


    for(int j=0;j<n;j++){
        cin>>v[j][2];
    }


    sort(v.begin(),v.end(),compare);


    // for(int i=0;i<n;i++)

    // {

    //     cout<<v[i][0]<<" "<<v[i][1]<<" "<<v[i][2]<<endl;

    // }

    int ans=0;

    for(int i=1;i<n;i++){

        if(v[i][0]<=v[i-1][0]){

```



```

        int inc=v[i-1][0]-v[i][0]+1;

        int count=ceil((inc*1.0)/(v[i][2]*1.0));

        // cout<<i<<" "<<count<<" "<<inc<<" ";

        ans+=count;

        v[i][0]+=v[i][2]*count;

        // cout<<v[i][0]<<endl;

    }

}

cout<<ans<<endl;

}


return 0;

}

```

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23 / 50



Next Problem

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Status: ✓ Correct Answer

Submission ID: [84627304](#)

Time:

0.05s

Sub-Task	Task #	Result (time)
1	0	AC (0.003967)

Q6. Flip Sorting

Code:

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

using namespace std;

#define ll long long int

int main()

{

ll t;

cin>>t;

while(t--)

{

int n;

cin>>n;

string s;

cin>>s;

string k=s;

sort(k.begin(),k.end());

if(k==s)

cout<<"0"<<endl;

else

{

int count=0;

for(int i=0;i<n-1;i++)

{ if(s[i]!=s[i+1])

count++;

}

cout<<count<<endl;
```


```

for(int i=n-2;i>=0;i--)
{ if(s[i]!=s[i+1])
    cout<<"1"<<" "<<i+1<<endl;
}
}
}
}
}

```


Test against Custom Input

3
6
110111
9

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24 / 50


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Next Problem

Status:  Correct Answer
Submission ID: [84627528](#)

Time:
0.08s

Q7. Chef and sorting

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

```
using namespace std;
```

```
typedef long long ll;
```

```
#define maxN 1010
```

```
#define maxK 60
```

```

#define mod 1000000007

int a[maxN];

int main(){
    int tc, n, i, j, k, l = (1 << 30) - 1;
    scanf("%d", &tc);
    while (tc--){
        scanf("%d", &n);
        for (i = 0; i < n; i++) {
            scanf("%d", &a[i]);
        }
        j = 0, k = 1;
        for (i = 1; i < n; i++) {
            if (a[i - 1] < a[i]) {
                k++;
            }
            else if (a[i - 1] > a[i]) {
                j++;
            }
        }
        printf("%d\n", min(j, k));
        if (k < j) {
            printf("%d %d %d\n", 3, n, l);
            for (i = 0; i < n; i++) {
                a[i] ^= l;
            }
        }
    }
}

```

```
}  
  
for (i = 1; i < n; i++) {  
    if (a[i - 1] > a[i]) {  
        printf("%d %d %d\n", 2, i + 1, a[i - 1] - a[i]);  
    }  
}  
  
return 0;  
}
```

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26 / 50



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Next Problem

Status:  Correct Answer

Submission ID: [84627720](#)

Time:

0.10s

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