**Approximate Answer -** [**https://www.codechef.com/problems/P1149**](https://www.codechef.com/problems/P1149)

**Code :**

#include<bits/stdc++.h>

using namespace std;

int main(){

    int x,y,k;

    cin>>x>>y>>k;

    if(abs(x-y) <= k)

        cout<<"Yes"<<endl;

    else

        cout<<"No"<<endl;

    return 0;

}

**A. GamingForces -** [**https://codeforces.com/problemset/problem/1792/A**](https://codeforces.com/problemset/problem/1792/A)

#include <bits/stdc++.h>

using namespace std;

int main() {

    ios::sync\_with\_stdio(false);

    cin.tie(nullptr);

    int t;cin>>t;

    while (t--)

    {

        int n;cin>>n;

        int arr[n];

        int cnt1 = 0, cnt2 = 0;

        for(int i=0;i<n;i++){

            cin>>arr[i];

            if(arr[i]==1)

                cnt1++;

            else

                cnt2++;

        }

        int result = cnt2 + (cnt1 + 1)/2 ;

        cout<<result<<endl;

    }

    return 0;

}

**A. Draw a Square -** [**https://codeforces.com/problemset/problem/2074/A**](https://codeforces.com/problemset/problem/2074/A)

#include <bits/stdc++.h>

using namespace std;

int main()

{

    ios::sync\_with\_stdio(false);

    cin.tie(nullptr);

    int t;

    cin >> t;

    while (t--)

    {

        int arr[5];

        for (int i = 0; i < 4; i++)

        {

            cin >> arr[i];

        }

        bool possible = true;

        for (int i = 1; i < 4; i++)

        {

            if (arr[i] != arr[i - 1])

            {

                possible = false;

            }

        }

        if (!possible)

            cout << "No" << endl;

        else

            cout << "Yes" << endl;

    }

    return 0;

}

**A. Mahmoud and Ehab and the MEX -** [**https://codeforces.com/problemset/problem/862/A**](https://codeforces.com/problemset/problem/862/A)

Code :

#include<bits/stdc++.h>

using namespace std;

int main(){

    int n,x;cin>>n>>x;

    int arr[n];

    int lessCnt=0, equalCnt=0;

    for(int i=0;i<n;i++){

        cin>>arr[i];

        if(arr[i]<x)

            lessCnt++;

        else if(arr[i]==x)

            equalCnt++;

    }

    int missingCnt = x - lessCnt;

    int ans = missingCnt + equalCnt;

    cout<<ans<<endl;

    return 0;

}

**A. Twin Permutations -** [**https://codeforces.com/problemset/problem/1831/A**](https://codeforces.com/problemset/problem/1831/A)

#include <bits/stdc++.h>

using namespace std;

int main() {

    ios\_base::sync\_with\_stdio(false);

    cin.tie(NULL);

    int t;cin >> t;

    while (t--) {

        int n;cin >> n;

        vector<int> a(n);

        for (int i = 0; i < n; ++i)

            cin >> a[i];

        for (int i = 0; i < n; ++i) {

            cout << (n - a[i] + 1);

            if (i + 1 < n)

                cout << " ";

        }

        cout << "\n";

    }

    return 0;

}

**A – Buttons -** [**https://atcoder.jp/contests/abc124/tasks/abc124\_a?lang=en**](https://atcoder.jp/contests/abc124/tasks/abc124_a?lang=en)

Code :

#include<bits/stdc++.h>

using namespace std;

int main(){

    int a,b;cin>>a>>b;

    if( 2\*a - 1 >= (a+b))

        cout<<2\*a - 1<<endl;

    else

        cout<<a+b<<endl;

    return 0;

}