**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;

}

**B - Not Found -** [**https://atcoder.jp/contests/abc071/tasks/abc071\_b?lang=en**](https://atcoder.jp/contests/abc071/tasks/abc071_b?lang=en)

#include<bits/stdc++.h>

using namespace std;

int main(){

    string s;cin>>s;

    vector<char>v;

    for (char i = 'a'; i <= 'z'; i++)

    {

        v.push\_back(i);

    }

    bool vis[26]={false};

    for (int i = 0; i < s.size(); i++)

    {

        if(vis[s[i]-'a']==false){

            vis[s[i]-'a']=true;

        }

    }

    for(int i=0;i<26;i++){

        if(vis[i]==false){

            cout<<v[i]<<endl;

            return 0;

        }

    }

    cout<<"None"<<endl;

    return 0;

}

**B - How many? -** [**https://atcoder.jp/contests/abc214/tasks/abc214\_b**](https://atcoder.jp/contests/abc214/tasks/abc214_b)

#include <iostream>

using namespace std;

int main() {

    int S, T;cin >> S >> T;

    int cnt = 0;

    for (int a = 0; a <= S; ++a) {

        for (int b = 0; b <= S - a; ++b) {

            for (int c = 0; c <= S - a - b; ++c) {

                if (a \* b \* c <= T) {

                    cnt++;

                }

            }

        }

    }

    cout << cnt << '\n';

    return 0;

}

**B - Minor Change -** [**https://atcoder.jp/contests/abc172/tasks/abc172\_b**](https://atcoder.jp/contests/abc172/tasks/abc172_b)

#include<bits/stdc++.h>

using namespace std;

int main(){

    string s,t;cin>>s>>t;

    int cnt = 0;

    for (int i = 0; i < s.size(); i++)

    {

        if(s[i]!=t[i]){

            cnt++;

        }

    }

    cout<<cnt<<endl;

    return 0;

}