

Problem name

Odd one Out

Problem statement

Alice and Bob are getting bored so they decided to play a game.

Alice has n cards having the first n odd numbers written on them. He removes one of the cards at random and hands the remaining $n-1$ cards to Bob. Help Bob to find the value of the card Alice has removed.

Input

The first line contains n the numbers of cards Alice has.

The second line contains $n-1$ space-separated integers representing the values of cards that Bob got.

Output

Print the value of card Alice removed.

Constraints

$$1 \leq n \leq 4000000$$

Basic Idea

The sum of first n odd numbers is given by $n*n$. So the number removed will have the value $n*n$ - sum of all the elements of the given array.

Note:- For C++ it is needed to use FastIo in order to get all the test cases passed.

Ideal Solution in C++

```
#include <bits/stdc++.h>
using namespace std;
#define ll long long

ll sumArray(vector<ll> v){
    ll s = 0;
    for (ll i = 0; i < v.size();i++)
        s += v[i];
    return s;
}

int main(){
    ll n;
    cin >> n;
    vector<ll> v(n - 1);
    for (ll i = 0; i < n - 1;i++)
        cin >> v[i];
    cout << (n * n - sumArray(v));
    return 0;
}
```