Marwadi University	**Marwadi University** **Faculty of Technology** **Department of Information and Communication Technology**	
Sem : 3	**Name : VEDANT BHARAD**	
Day : 66	**Date : 22/12/2022**	**Enrollment No: 92100133023**

CP Club 365Days Challenge

Programming language – C++

Problem Statement

https://practice.geeksforgeeks.org/problems/equilibrium-point-1587115620/1?page=1&curated[]=1&sortBy=submissions

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Your Code:

```cpp
// 0x66Day of 0x365Days challenge
// VEDANT BHARAD
// 22-12-2022
//{ Driver Code Starts
#include <iostream>
using namespace std;
// } Driver Code Ends
class Solution{
    public:
    // Function to find equilibrium point in the array.
    // a: input array
    // n: size of array
    int equilibriumPoint(long long a[], int n) {
        // Your code here
        if(n==1)
            return 1;
        long total = 0;
        long sum=0;
        for(int loop=0; loop<n; loop++){
            total+=a[loop];
        }
        for(int loop=1; loop<n; loop++)
        {
            sum+=a[loop-1];
            if(total-sum-a[loop]==sum) {
                return loop+1;
            }
        }
        return -1;
    }
};
//{ Driver Code Starts.
int main() {
    long long t;
    //taking testcases
    cin >> t;
    while (t--) {
        long long n;
        //taking input n
        cin >> n;
        long long a[n];
        //adding elements to the array
        for (long long i = 0; i < n; i++) {
            cin >> a[i];
        }
        Solution ob;
        //calling equilibriumPoint() function
        cout << ob.equilibriumPoint(a, n) << endl;
    }
    return 0;
}
// } Driver Code Ends
```

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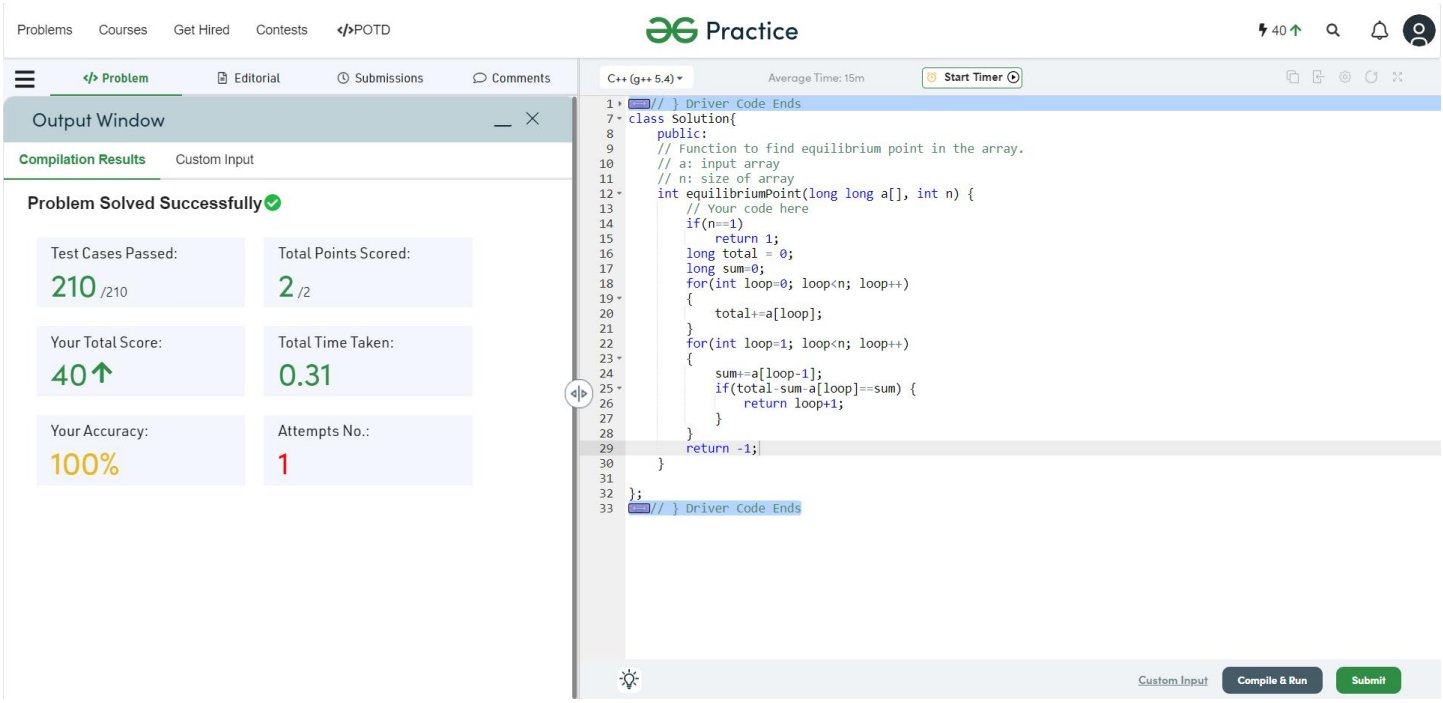
Output (Screen Shot):



Understanding about problem:

- In this task I need to return first Equilibrium Point in an array.
- Equilibrium Point in an array is a position such that the sum of elements before it is equal to the sum of elements after it.

Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.

ALL THE BEST

Team CP Club