
 Marwadi University	Marwadi University Faculty of Technology Department of Information and Communication Technology	
Sem : 4	Name : VEDANT BHARAD	
Day : 69	Date : 25/12/2022	Enrollment No: 92100133023

CP Club 365Days Challenge

Programming language – C++

Problem Statement


<https://www.interviewbit.com/problems/find-variance/>

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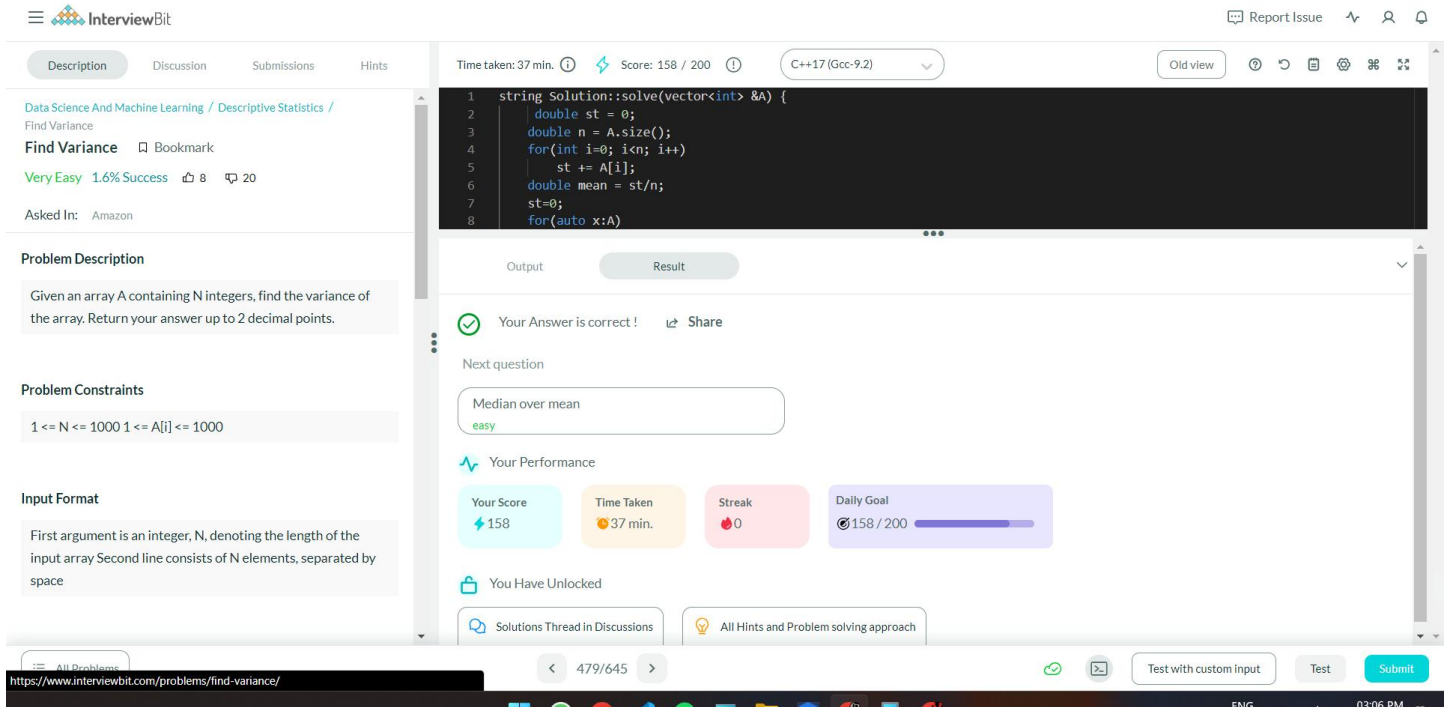
Your Code:

```
// 0x69Day of 0x365Days challenge
// VEDANT BHARAD
// 25-12-2022
#include <iostream>
#include <vector>
#include <cmath>
#include <iomanip>
using namespace std;
string myfun(vector<int> &A) {

    double st = 0;
    double n = A.size();
    for(int i=0; i<n; i++)
        st += A[i];
    double mean = st/n;
    st=0;
    for(auto x:A)
        st += pow(x-mean,2);
    st /= n;
    st *= 100;
    st = round(st);
    string s = to_string(st/100);
    size_t p = s.find('.');
    return s.substr(0,p+3);
}
int main() {
    int n;
    cin >> n;
    int arr[n];
    for (int i = 0; i < n; i++) {
        cin >> arr[i];
    }
    vector<int> vect(arr, arr + n);
    cout << myfun(vect) << endl;
    return 0;
}
```

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Output (Screen Shot):



The screenshot shows the InterviewBit interface for the problem "Find Variance". The problem description states: "Given an array A containing N integers, find the variance of the array. Return your answer up to 2 decimal points." The constraints are $1 \leq N \leq 1000$ and $1 \leq A[i] \leq 1000$. The input format specifies that the first argument is an integer N, and the second line consists of N elements separated by space.

The solution code is written in C++ (Gcc-9.2) and is as follows:

```
1 string Solution::solve(vector<int> &A) {
2     double st = 0;
3     double n = A.size();
4     for(int i=0; i<n; i++)
5         st += A[i];
6     double mean = st/n;
7     st=0;
8     for(auto x:A)
```

The output shows "Your Answer is correct!" with a green checkmark. Below this, there is a "Next question" section with "Median over mean" and "easy" difficulty. A "Your Performance" section displays: Your Score: 158, Time Taken: 37 min., Streak: 0, and Daily Goal: 158/200. At the bottom, there are buttons for "Solutions Thread in Discussions", "All Hints and Problem solving approach", "Test with custom input", "Test", and "Submit".

Understanding about problem:

- In this task there will be one vector and I need to return Variance value of array in string.

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