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Test Name:	**Mock Test**
Taken On:	21 Oct 2023 01:32:30 IST
Time Taken:	2 min 10 sec/ 10 min
Resume:	https://hackerrank-resumes.s3.amazonaws.com/12216067/NeyaRbrS_h60_OczMKX3xAyHjQwG1mkEovOLeLB9fntAeIVcNTf7D8FqE5dM72JFyA/Mohamed_Samir_Salem___Flutter_Developer.pdf
Linkedin:	https://www.linkedin.com/in/mohamed-samir-9b0b2a203
Invited by:	Ankush
Invited on:	21 Oct 2023 01:18:17 IST
Skills Score:	
Tags Score:	Algorithms 105/105 Core CS 105/105 Easy 105/105 Problem Solving 105/105 Search 105/105 Sorting 105/105 problem-solving 105/105

100%
105/105

scored in **Mock Test** in 2 min 10 sec on 21 Oct 2023 01:32:30 IST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Find the Median > **Coding**	1 min 57 sec	105/ 105	✓

QUESTION 1

Correct Answer

Score 105

Find the Median > Coding

Sorting | Search | Algorithms | Easy | problem-solving | Core CS | Problem Solving

QUESTION DESCRIPTION

The median of a list of numbers is essentially its middle element after sorting. The same number of elements occur after it as before. Given a list of numbers with an odd number of elements, find the median?

Example

$arr = [5, 3, 1, 2, 4]$

The sorted array $arr' = [1, 2, 3, 4, 5]$. The middle element and the median is 3.

Function Description

Complete the *findMedian* function in the editor below.

findMedian has the following parameter(s):

- *int arr[n]:* an unsorted array of integers

Returns

- *int:* the median of the array

Input Format

The first line contains the integer n, the size of arr.
The second line contains n space-separated integers $arr[i]$

Constraints

- $1 \leq n \leq 1000001$
- n is odd
- $-10000 \leq arr[i] \leq 10000$

Sample Input 0

```
7
0 1 2 4 6 5 3
```

Sample Output 0

```
3
```

Explanation 0

The sorted $arr = [0, 1, 2, 3, 4, 5, 6]$. It's middle element is at $arr[3] = 3$.

CANDIDATE ANSWER

Language used: **C++14**

```cpp
#include "bits/stdc++.h"

using namespace std;

typedef long long int ll;
#define all(a)  a.begin(),a.end()

ll dx[] = {+0, +0, -1, +1, +1, +1, -1, -1};
ll dy[] = {-1, +1, +0, +0, +1, -1, +1, -1};

void _Depressed() {
    ios_base::sync_with_stdio(false);
    cin.tie(nullptr);
    cout.tie(nullptr);
// #ifndef ONLINE_JUDGE
//     freopen("input.in", "r", stdin);
//     freopen("output.txt", "w", stdout);
// #endif
}

const ll OO = 0X3F3F3F3F3F3F3F3F;
const ll N = 1e5 + 5, INF = INT_MAX, MOD = 1e9 + 7, LOG = 20;


bool comp (string a, string b) {
    if(a.length() == b.length()) return  a < b;
    else return a.length() < b.length();
}
void solve(ll test_case) {
   int n;
   cin >> n;

```

```
    vector<int> a(n);
    for(auto &item : a) {
        cin >> item;
    }
    sort(all(a));
    cout << a[a.size()/2 ] <<endl;

}

int main() {
    _Depressed();
    ll tc;
    tc = 1;
//    cin >> tc;
    for (ll test_case = 1; test_case <= tc; test_case++) {
        solve(test_case);
    }
}

```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0651 sec	8.84 KB
Testcase 2	Easy	Hidden case	Success	35	0.0481 sec	8.8 KB
Testcase 3	Easy	Hidden case	Success	35	0.0517 sec	8.8 KB
Testcase 4	Easy	Hidden case	Success	35	0.0664 sec	9.01 KB

No Comments