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Test Name: Mock Test

Taken On: 4 Dec 2022 23:43:44 IST

Time Taken: 9 min/ 10 min

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Invited by: Ankush

Invited on: 4 Dec 2022 23:43:24 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 9 min on
4 Dec 2022 23:43:44 IST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Find the Median > Coding	8 min 49 sec	105/ 105	✓

QUESTION 1

✓

Correct Answer

Score 105

Find the Median > Coding

SortingSearchAlgorithmsEasyproblem-solvingCore 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

```
1  /*
2   * Complete the 'findMedian' function below.
3   *
4   * The function is expected to return an INTEGER.
5   * The function accepts INTEGER_ARRAY arr as parameter.
6   */
7
8  int findMedian(vector<int> arr) {
9      sort(arr.begin(),arr.end());
10     if (arr.size()%2){
11         return arr[arr.size()/2];
12     }
13     else return (arr[arr.size()/2] + arr[(arr.size()/2)+1])/2;
14 }
15
16
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	✔ Success	0	0.0409 sec	8.88 KB
Testcase 2	Easy	Hidden case	✔ Success	35	0.0464 sec	9.04 KB
Testcase 3	Easy	Hidden case	✔ Success	35	0.0288 sec	9.02 KB
Testcase 4	Easy	Hidden case	✔ Success	35	0.076 sec	13.1 KB

