| | |
|---|---|
| Full Name: | Doli |
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| Test Name: | **Mock Test** |
| Taken On: | 16 Jan 2024 22:55:17 IST |
| Time Taken: | 3 min 44 sec/ 15 min |
| Linkedin: | https://www.linkedin.com/in/musab-oguz-68990a200/ |
| Invited by: | Ankush |
| Invited on: | 16 Jan 2024 21:16:16 IST |
| Skills Score: | |
| Tags Score: | Algorithms 105/105<br>Core CS 105/105<br>Easy 105/105<br>Problem Solving 105/105<br>Search 105/105<br>Sorting 105/105<br>problem-solving 105/105 |

**100%**

**105/105**

scored in **Mock Test** in 3 min 44 sec on 16 Jan 2024 22:55:17 IST

**Recruiter/Team Comments:**

*No Comments.*

| | Question Description | Time Taken | Score | Status |
|---|---|---|---|---|
| Q1 | Find the Median > **Coding** | 3 min 25 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**

```
/*
 * Complete the 'findMedian' function below.
 *
 * The function is expected to return an INTEGER.
 * The function accepts INTEGER_ARRAY arr as parameter.
 */

int findMedian(vector<int> arr) {
    int med = arr.size()/2;

    sort(arr.begin(), arr.end());

    return arr.at(med);
}
```

| TESTCASE | DIFFICULTY | TYPE | STATUS | SCORE | TIME TAKEN | MEMORY USED |
|---|---|---|---|---|---|---|
| Testcase 1 | Easy | Sample case | Success | 0 | 0.1041 sec | 8.56 KB |
| Testcase 2 | Easy | Hidden case | Success | 35 | 0.0079 sec | 9.02 KB |
| Testcase 3 | Easy | Hidden case | Success | 35 | 0.0082 sec | 9.04 KB |
| Testcase 4 | Easy | Hidden case | Success | 35 | 0.1011 sec | 13.3 KB |

No Comments