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Test Name:	**Mock Test**
Taken On:	4 Sep 2024 03:12:51 IST
Time Taken:	9 min 56 sec/ 10 min
Invited by:	Ankush
Invited on:	4 Sep 2024 03:02:56 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 56 sec on 4 Sep 2024 03:12:51 IST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Find the Median > **Coding**	9 min 44 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: **Java 8**

```
1
2  class Result
3  {
4
5      /*
6       * Complete the 'findMedian' function below.
7       *
8       * The function is expected to return an INTEGER.
9       * The function accepts INTEGER_ARRAY arr as parameter.
10      */
11
12      public static int findMedian(List<Integer> arr)
13      {
14          // Write your code here
15
16          Collections.sort(arr);
17          int arrSize = arr.size();
18
19          int median = 0;
20
21          if(arrSize % 2 != 0)
22          {
23              median = arr.get(arrSize / 2);
24          }
25
26          else
27          {
28             int median1 = (arrSize) / (2 - 1);
29              int median2 = (arrSize) / (2);
30
```

```
31                median = (arr.get(median1) + arr.get(median2)) / 2;
32            }
33
34            return median;
35
36        }
37    }
38
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.1072 sec	30.7 KB
Testcase 2	Easy	Hidden case	Success	35	0.1524 sec	32.7 KB
Testcase 3	Easy	Hidden case	Success	35	0.136 sec	33.6 KB
Testcase 4	Easy	Hidden case	Success	35	0.2256 sec	45.6 KB

No Comments