

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, can you find the [median](#)?

For example, the median of $arr = [1, 2, 3, 4, 5]$ is **3**, the middle element in the sorted array.

Function Description

Complete the *findMedian* function in the editor below. It must return an integer that represents the median of the array.

findMedian has the following parameter(s):

- *arr*: an unsorted array of integers

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
- $-10000 \leq arr[i] \leq 10000$

Output Format

Output one integer, the median.

Sample Input 0

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

Sample Output 0

```
3
```

Explanation 0

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