https://course.acciojob.com/idle?question=629217db-7ed5-4c49-9aff-ed7ecbd251af

- MEDIUM
- Max Score: 40 Points

Find Minimum in Rotated Sorted Array

Suppose an array of length `n` sorted in ascending order is rotated between `1` and `n` times. For example, the array nums = [0,1,2,4,5,6,7] might become:

[4,5,6,7,0,1,2] if it was rotated 4 times.

[0,1,2,4,5,6,7] if it was rotated 7 times.

Notice that rotating an array [a[0], a[1], a[2], ..., a[n-1]] 1 time results in the array [a[n-1], a[0], a[1], a[2], ..., a[n-2]].

Given the sorted rotated array `nums` of unique elements, print the minimum element of this array.

Note: Write an algorithm that runs in O(logn) time.

Input Format

The first line contains a single integer `n`, number of elements in the array.

The second line contains `n` space-separated integers representing array `nums`.

Output Format

Print a single number — the minimum element of this array.

Example 1

Input

```
5
3 4 5 1 2
```

Output

```
1
```

Explanation

The original array was [1,2,3,4,5] rotated 4 times.

Example 2

Input

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

Output

```
0
```

Explanation

The original array was [0, 1, 2, 4, 5, 6, 7] rotated 3 times.

Constraints

1 <= n <= 5000

-5000 <= nums[i] <= 5000

All the integers of nums are unique.

Topic Tags

- **Binary Search**

My code

// n java

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- **Max Score: 40 Points**
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