

Sorted and Rotated Minimum

Difficulty: Easy

Accuracy: 40.57%

Submissions: 138K+

Points: 2

A sorted array of distinct elements `arr[]` is rotated at some unknown point, the task is to find the minimum element in it.

Examples:

Input: `arr[] = [5, 6, 1, 2, 3, 4]`**Output:** 1**Explanation:** 1 is the minimum element in the array.**Input:** `arr[] = [3, 1, 2]`**Output:** 1**Explanation:** Here 1 is the minimum element.**Input:** `arr[] = [4, 2, 3]`**Output:** 2**Explanation:** Here 2 is the minimum element.

Constraints:

 $1 \leq arr[i] \leq 10^6$

```
1 // } Driver Code Ends
28
29 class Solution {
30     public int findMin(int[] arr) {
31         int lo = 0, hi = arr.length - 1;
32         while (lo < hi) {
33             if (arr[lo] < arr[hi])
34                 return arr[lo];
35             int mid = (lo + hi) / 2;
36             if (arr[mid] > arr[hi])
37                 lo = mid + 1;
38             else
39                 hi = mid;
40         }
41         return arr[lo];
42     }
43 }
44
```

