

<https://course.acciojob.com/idle?question=fcaaf203-0d9f-441f-955d-7b87d2fbd28a>

MEDIUM

Max Score: 40 Points

Minimum Element in Rotated and Sorted Array

Given an array `arr` which is sorted in ascending order and contains `n` elements. Also, this array is rotated at some unknown point. The task is to find the minimum element in it.

Input Format

line 1: contains an integer `n` denoting the size of array.

line 2: contains `n` separated integers denoting elements of array.

Output Format

Print a single integer denoting the minimum element of the array.

Example 1

Input

```
10
2 3 4 5 6 7 8 9 10 1
```

Output

1

Example 2

Input

10
7 8 9 10 3 4 5 6

Output

3

Constraints

$1 \leq n \leq 10^5$

$1 \leq \text{arr}[i] \leq 10^6$

Topic Tags

Arrays

My code

// in java

```
import java.util.*;  
import java.lang.*;  
import java.io.*;
```

```
public class Main  
{
```

```
public static void main (String[] args) throws
java.lang.Exception
{
    //your code here
    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
    int min=Integer.MAX_VALUE;
    for(int i=0;i<n;i++)
    {
        int t=s.nextInt();
        if(min>t)
            min=t;
    }
    System.out.print(min);
}
}
```