

<https://course.acciojob.com/idle?question=fcd0d2c0-df0b-4c65-b6ff-7b59b98bd24d>

MEDIUM

Max Score: 40 Points

Shortest Unsorted Continuous Subarray

Find a continuous subarray within an integer array `nums` of size `n` such that, if you only sort this continuous subarray in ascending order, the entire array will also be sorted in ascending order.

Give the length of the shortest such subarray.

Input Format

First line contains an integer `n` which is the size of `nums`

Next line contains `n` space-separated integers which are the elements of `nums`

Output Format

Complete the function `UnsortedSubarrayLength()` which returns the required integer

Example 1

Input

```
6
3 7 5 9 11 10 16
```

Output

```
5
```

Explanation

To sort the entire array in ascending order, you must first sort [7, 5, 9, 11, 10] in ascending order.

Example 2

Input

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

Output

```
0
```

Constraints

$1 \leq n \leq 10^4$

$1 \leq \text{nums}[i] \leq 10^5$

Topic Tags

2-Pointers

Greedy

Sta

My code

// in java

```
import java.util.*;
```

```
class Solution {
    public int UnsortedSubarrayLength(int[] nums) {
        // Write your code here
        int arr[]=new int[nums.length];
        for(int i=0;i<nums.length;i++)
        {
            arr[i]=nums[i];
        }
        Arrays.sort(arr);
        int l=0;
        int r=nums.length-1;
        while(l<nums.length)
        {
            if(arr[l]!=nums[l])
                break;
            l++;
        }
        while(r>=0)
        {
            if(nums[r]!=arr[r])
```

```

        break;
        r--;
    }
    if(r<l)
        return 0;
    return r-l+1;
}
}

```

```

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int[] ar = new int[n];
        for(int i = 0; i < n; i++)
            ar[i] = sc.nextInt();

        Solution Obj = new Solution();
        System.out.println(Obj.UnsortedSubarrayLength(ar));
    }
}

```