https://course.acciojob.com/idle?question=dcbd4272-4f3d-49f6-9be6-847eb0e812dd

- HARD
- Max Score: 50 Points

Next Greater Element-ii

Given a circular integer array `nums` (i.e., the next element of nums[nums.length - 1] is nums[0]), return the next greater number for every element in `nums`.

The next greater number of a number `x` is the first greater number to its traversing-order next in the array, which means you could search circularly to find its next greater number. If it doesn't exist, print `-1` for this number.

Input Format

The first line contains a single integer `n`. Second line contains `n` spaced integers.

Output Format

Print the next greater element for each array value and if it doesnt exist then print `-1`

Example 1

Input

```
3
1 2 1
```

Output

```
2 -1 2
```

Explanation

The first 1's next greater number is 2;

The number 2 can't find next greater number.

The second 1's next greater number needs to search circularly, which is also 2.

Example 2

Input

```
6
1 2 3 4 3 3
```

Output

```
2 3 4 -1 4 4
```

Explanation

Here , next greatest of 1st element is 2. Next greatest of second is 3 ans similarly we will check next larger even circularly.

Constraints

```
1 <= nums.length <= 10^4
```

```
-10^9 <= nums[i] <= 10^9
```

Topic Tags

- Stacks
- Arrays

My code

```
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 arr[]=new int[n];
    for(int i=0;i<n;i++)
      arr[i]=s.nextInt();
      for(int i=0;i<n;i++)
        { int c=0;
         int a=i+1;a=a%n;
         int p=arr[i];
          while(arr[a]<=p)
            {
              if(c==n) break;//one rotation complet
              c=c+1;
              a++;
             if(a==n) a=0;
            }
         if(c==n) System.out.print("-1 ");
         else System.out.print(arr[a]+" ");
           }


	}
}
```