https://course.acciojob.com/idle?question=aa1abcd4-af6f-4c1f-be44-b9ee9178f028

- EASY
- Max Score: 30 Points

PEAK ELEMENT

An element is called a peak element if its value is not smaller than the value of its adjacent elements(if they exists).

For first and last element consider only the element next to it.

Given an array `arr[]` of size `n`, find the index of first peak element.

If peak element does not exist print -1.

Input Format

Input consists of two lines.

First line contains an integer `n`.

Next line contains `n` spaced integers.

Output Format

Return the index of the peak element in zero based indexing if present, else return `-1`

Example 1

Input

```
4
5 10 20 15
```

Output

```
2
```

Explanation

20 is greater than both of its neighbours. Hence 20 is the peak element, So output is 2

Example 2

Input

```
7
10 20 15 2 23 64 67
```

Output

1

Explanation

20 is greater than both of its neighbors. Hence 20 is the peak element, So output is 1

Constraints

1<=n<=10^6

1<=arr[i]<=10^6

Topic Tags

- **Arrays**

My code

```
// n 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[] arr = new int[n+1];
```

```
        if (n <= 1000000 && n >= 1){
            for (int i = 0; i < n; i++) {
                arr[i] = s.nextInt();
            }
            for (int i = 0; i < n; i++) {
                if (arr[i] <= 1000000 && arr[i] >= 1) {
                  if(i==0){
                    if(arr[0]>arr[i+1]){
                         System.out.println(i);
                           break;
                     }
                   }
                   if(i>0||i<n-1){
                         if (arr[i] > arr[i + 1] && arr[i] > arr[i - 1]) {
                            System.out.println(i);
                            break;
                        }
                    }
                   if(i==n-1){
                    if(arr[n-1]>arr[n-2]){
                      System.out.println(-1);
                      break;
                    }
                   }
        }
    }
}
    }
}
```