

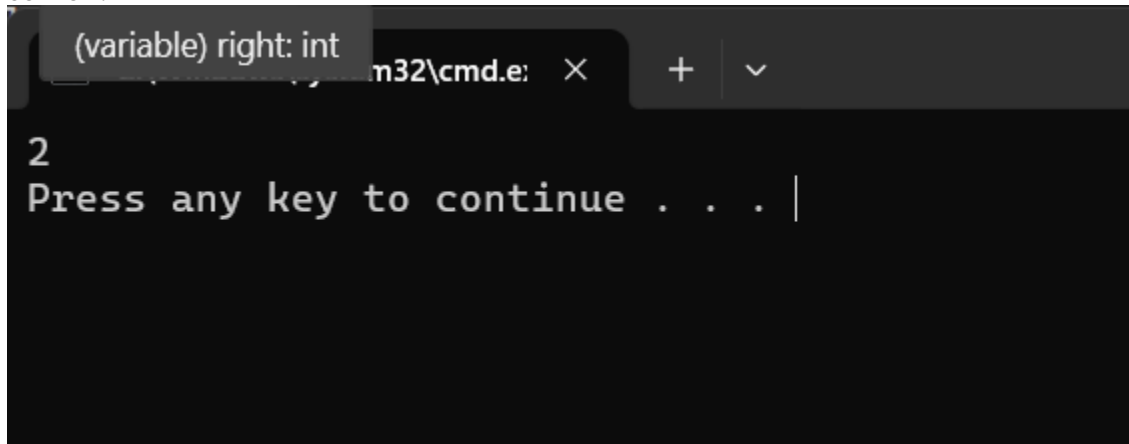
136)Peak element

CODE:

```
def find_peak(nums):  
    left, right = 0, len(nums) - 1  
    while left < right:  
        mid = left + (right - left) // 2  
        if nums[mid] < nums[mid + 1]:  
            left = mid + 1  
        else:  
            right = mid  
    return left
```

```
a=[1,2,3,1]  
print(find_peak(a))
```

OUTPUT:

A screenshot of a terminal window with a dark background. At the top, there are two tabs: the first is labeled '(variable) right: int' and the second is labeled 'm32\cmd.e'. Below the tabs, the number '2' is displayed on the first line, and the text 'Press any key to continue . . . |' is on the second line, with a vertical cursor bar at the end.

TIME COMPLEXITY : $O(\log n)$