Solution Review: Check If List Is Sorted

This lesson will explain how to check if a list is sorted.

WE'LL COVER THE FOLLOWING ^

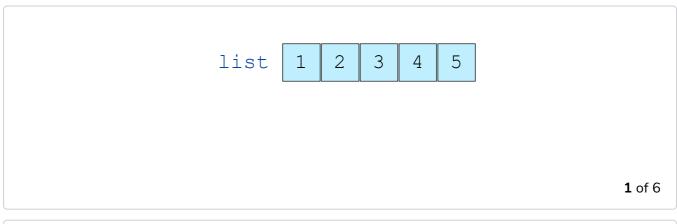
Solution: Use a Loop

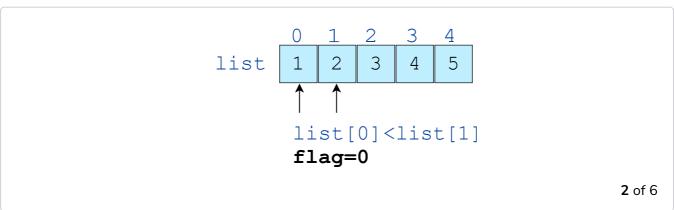
Solution: Use a Loop

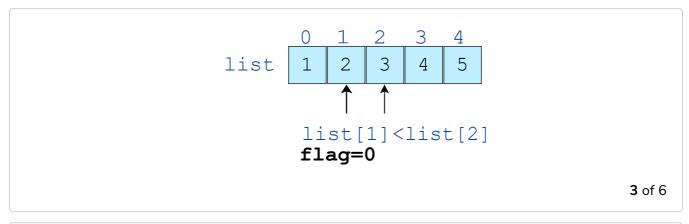
Use a while loop that iterates over the length of the list and checks if the previous element in the list is less than the next element. If so, a variable flag is set to true. If the flag is false, a list is sorted and vice versa.

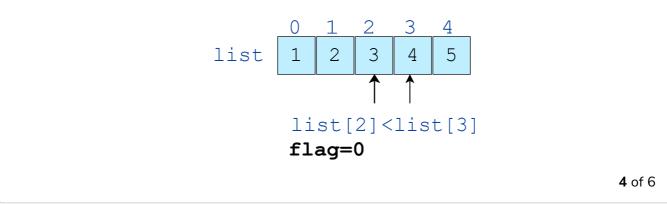
The following illustrations explain the concept of sorting a list.

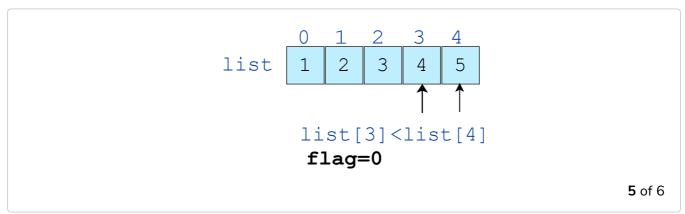
Case 1: If the list is sorted

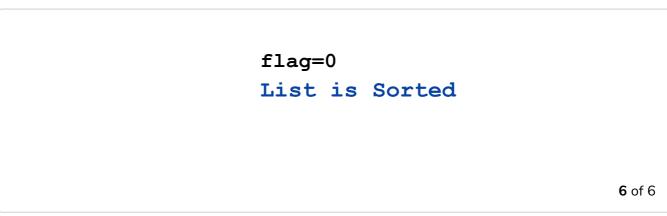




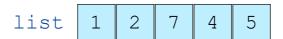




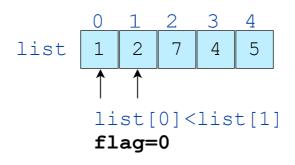




Case 2: If the list is not sorted



of 6



of 6

of 6

of 6

of 6

flag=1 List is UnSorted 6 of 6

- (3)

The following python code demonstates how to check if the list is sorted.

```
def isSorted(list):
    flag = 0
    i = 1
    while i < len(list):
        if(list[i] < list[i - 1]): # compare with the previous element
            flag = 1
        i += 1

    if (not flag):
        return True
    else:
        return False
    print(isSorted([1,2,3,4,5]))
    print(isSorted([1,2,5,4,2]))</pre>
```

Now, let's move on to the next problem.