

We will check and call your code as follows:

Q1:

```
In [5]: from q1 import *
```

```
In [6]: testl1 = SinglyLinkedList()
        for i in range(4):
            testl1.insert(i)
```

Here is to define a single linked list. And the function 'insert' is to insert a number to the tail of the list

```
In [7]: print(testl1.recursive_count(testl1.head))
4
```

Here is to print size of the single linked list. The object 'head', an instance of 'Node' class, is the first node of the list.

Q2:

```
In [25]: from q2 import *
```

```
In [26]: testl1 = SinglyLinkedList()
        nums = [4, 2, 3, 1, 0, -1]
        len_nums = len(nums)
        for i in range(len_nums):
            testl1.insert(nums[i])
```

Here is to define an instance of the single linked list, 'testl1'. And the numbers in 'nums' are inserted into the list and the function 'insert' is to insert a number to the tail of the list.

```
In [27]: testl1.quick_sort(testl1.head)
```

Here is to sort the list, 'testl1'.

```
In [28]: node_test = testl1.head
        print(node_test.element)

        while node_test.pointer != None:
            i = i+1
            node_test = node_test.pointer
            print(node_test.element)
```

```
-1
0
1
2
3
4
```

Here is to print the sorted list.