● Autocomplete

Description   Solution   Submissions   Discuss (88)

1265. Print Immutable Linked List in Reverse

Medium   👍 107   👎 24   ♡ Add to List   🔗 Share

You are given an immutable linked list, print out all values of each node in reverse with the help of the following interface:

- `ImmutableListNode`: An interface of immutable linked list, you are given the head of the list.

You need to use the following functions to access the linked list (you **can't** access the `ImmutableListNode` directly):

- `ImmutableListNode.printValue()`: Print value of the current node.
- `ImmutableListNode.getNext()`: Return the next node.

The input is only given to initialize the linked list internally. You must solve this problem without modifying the linked list. In other words, you must operate the linked list using only the mentioned APIs.

Follow up:

Could you solve this problem in:

- Constant space complexity?
- Linear time complexity and less than linear space complexity?

Example 1:

```
Input: head = [1,2,3,4]
Output: [4,3,2,1]
```

Example 2:

```
Input: head = [0,-4,-1,3,-5]
Output: [-5,3,-1,-4,0]
```

Example 3:

```
Input: head = [-2,0,6,4,4,-6]
Output: [-6,4,4,6,0,-2]
```

Constraints:

- The length of the linked list is between `[1, 1000]`.
- The value of each node in the linked list is between `[-1000, 1000]`.

Accepted 7,023 | Submissions 7,446

Seen this question in a real interview before?   Yes   No

Contributor

Companies 💼 (

```python
# """
# This is the
ImmutableListNode's API
interface.
# You should not
implement it, or speculate
about its implementation.
# """
# class
ImmutableListNode(object):
#     def
printValue(self): # print
the value of this node.
# .        """
#         :rtype None
#         """
#
#     def getNext(self):
# return the next node.
# .        """
#         :rtype
ImmutableListNode
#         """

class Solution(object):
    def
printLinkedListInReverse(s
elf, head):
        """
        :type head:
ImmutableListNode
        :rtype: None
        """
```