

연결 리스트를 뒤집어라.

Input: head = [1,2,3,4,5]

Output: [5,4,3,2,1]

```
# Definition for singly-linked list.
# class ListNode:
#     def __init__(self, val=0, next=None):
#         self.val = val
#         self.next = next
```

### 1. 브루트 포스

```
class Solution:
    def reverseList(self, head: ListNode) -> ListNode:
        result = None
        while head:
            result = ListNode(val = head.val, next = result)
            head = head.next
        return result
```

▸ 새로운 헤드를 만들어서 거꾸로 붙여 나간다.

### 2. 재귀 호출

```
class Solution:
    def reverseList(self, head: ListNode) -> ListNode:
        def reverse(node: ListNode, prev: ListNode = None) -> ListNode:
            if not node:
                return prev
            next, node.next = node.next, prev
            return reverse(next, node)
        return reverse(head)
```

### 3. 반복 호출

```
class Solution:
    def reverseList(self, head: ListNode) -> ListNode:
        node, prev = head, None
        while node:
            next, node.next = node.next, prev
            prev, node = node, next
        return prev
```