

```

import Foundation
/// 剑指 Offer 24. 反转链表
/// 定义一个函数，输入一个链表的头节点，反转该链表并输出反转后链表的头节点。
public class ListNode {
    public var val: Int
    public var next: ListNode?

    public init() {
        self.val = 0
        self.next = nil
    }
    public init(_ val: Int) {
        self.val = val
        self.next = nil
    }
    public init(_ val: Int, _ next: ListNode?) {
        self.val = val
        self.next = next
    }
}

class Solution {
    func reverseList(_ head: ListNode?) -> ListNode? {
        if head == nil || head?.next == nil {
            return head
        }
        var current = head
        var pre: ListNode? = nil
        while current != nil {
            let temp = current?.next
            current?.next = pre
            pre = current
            current = temp
        }
        return pre
    }
}

let solution = Solution()
let head1 = generateNode([1,2,3,4,5])
var result = solution.reverseList(head1)
while result != nil {
    if let val = result?.val {
        print(val)
    }
    result = result?.next
}

```