

Problem 3263: Convert Doubly Linked List to Array I

Problem Information

Difficulty: Easy

Acceptance Rate: 94.81%

Paid Only: Yes

Tags: Array, Linked List, Doubly-Linked List

Problem Description

You are given the `head` of a **doubly linked list** , which contains nodes that have a next pointer and a previous pointer.

Return an integer array which contains the elements of the linked list **in order**.

Example 1:

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

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

Example 2:

Input: head = [2,2,2,2,2]

Output: [2,2,2,2,2]

Example 3:

Input: head = [3,2,3,2,3,2]

Output: [3,2,3,2,3,2]

Constraints:

* The number of nodes in the given list is in the range `[1, 50]`. * `1 <= Node.val <= 50`

Code Snippets

C++:

```
/**  
 * Definition for doubly-linked list.  
 *  
 * class Node {  
 *     int val;  
 *     Node* prev;  
 *     Node* next;  
 *     Node() : val(0), next(nullptr), prev(nullptr) {}  
 *     Node(int x) : val(x), next(nullptr), prev(nullptr) {}  
 *     Node(int x, Node *prev, Node *next) : val(x), next(next), prev(prev) {}  
 * };  
 */  
class Solution {  
public:  
    vector<int> toArray(Node *head){  
  
    }  
};
```

Java:

```
/*  
 * Definition for a Node.  
 *  
 * class Node {  
 *     public int val;  
 *     public Node prev;  
 *     public Node next;  
 * };  
 */  
  
class Solution {  
    public int[] toArray(Node head) {  
  
    }  
}
```

Python3:

```
"""
# Definition for a Node.
class Node:
    def __init__(self, val, prev=None, next=None):
        self.val = val
        self.prev = prev
        self.next = next
"""

class Solution:
    def toArray(self, root: 'Optional[Node]') -> List[int]:
```