

# 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]:
```