

Problem Challenge 1

We'll cover the following ^

- Palindrome LinkedList (medium)
- Try it yourself

Palindrome LinkedList (medium)

Given the head of a **Singly LinkedList**, write a method to check if the **LinkedList is a palindrome** or not.

Your algorithm should use **constant space** and the input LinkedList should be in the original form once the algorithm is finished. The algorithm should have $O(N)$ time complexity where 'N' is the number of nodes in the LinkedList.

Example 1:





```
Input: 2 -> 4 -> 6 -> 4 -> 2 -> null
Output: true
```

Example 2:


```
Input: 2 -> 4 -> 6 -> 4 -> 2 -> 2 -> null
Output: false
```

Try it yourself

Try solving this question here:

 Java	 Python3	 JS	 C++
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```
1 class Node:
2     def __init__(self, value, next=None):
3         self.value = value
4         self.next = next
5
6
7 def is_palindromic_linked_list(head):
8     # TODO: Write your code here
9     return False
10
11
12
13 def main():
14     head = Node(2)
15     head.next = Node(4)
16     head.next.next = Node(6)
17     head.next.next.next = Node(4)
18     head.next.next.next.next = Node(2)
19
20     print("Is palindrome: " + str(is_palindromic_linked_list(head)))
21
22     head.next.next.next.next.next = Node(2)
23     print("Is palindrome: " + str(is_palindromic_linked_list(head)))
24
25
26 main()
27
28
29
30
31
32
33
34
```

Run Save Reset 



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Middle of the LinkedList (easy)

Solution Review: Problem Challenge 1

 Completed

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