

<https://course.acciojob.com/idle?question=4d529a8f-2016-4c69-9c8a-61329815420a>

● EASY

● Max Score: 30 Points

●

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Palindrome Linked List

Given the head of a linked list, check whether the linked list is palindromic or not.

Linked List Structure:

```
public class Node
{
    int data;
    Node next;
    Node(int d) {data = d; next = null; }
}
public class LinkedList
{
    Node head;
    Node tail;
}
```

If your list is [5, 4, 4, 5], the output should be YES.

Input Format

The first integer denotes n , the number of elements in the linked list.

The next n space separated integers denote the elements of the linked list.

Output Format

Output YES if the list is palindromic, else output NO.

Example 1

Input

```
4
5 4 4 5
```

Output

YES

Explanation

The given list is a palindrome

Example 2

Input

```
2
5 7
```

Output

NO

Explanation

The given list is not a palindrome

Constraints

$1 \leq n \leq 10^5$

Topic Tags

- **Linked lists**

My code

```
// in java
import java.util.*;
import java.lang.*;
import java.io.*;

class Node
{
    int data;
    Node next;

    Node(int data, Node next)
    {
        this.data = data;
        this.next = next;
    }

    Node() {}
}

public class Main
{

    static int com(Node h,Node n)
    {
        Node p=h;
        while(p!=null)
        {
            if(p.data!=n.data)
                return 0;
        }
    }
}
```

```

        p=p.next;
        n=n.next;
    }
    return 1;
}

```

```

static Node reverse(Node a)
{
    Node dummy = new Node();
    Node tail = dummy;
    while (true)
    {
        if (a == null) break;
        Node d=a;
        a=a.next;
        d.next=tail.next;
        tail.next=d;

    }

    return dummy.next;
}

```

```

// static Node rev(Node a)
// {
//     if(a!=null)
//     {
//         Node r=null,q=null ,t=null,p=null,h=null;

```

```

//    r=a;
//    p=a.next;
//    q=p;

//    while(true)
//    {
//        if(r.next ==null)
//            break;
//        else
//        {
//            r.next=q.next;
//            r=r.next;
//        }

//        if(q.next==null)
//            break;
//        else {
//            q.next=r.next;
//            q=q.next;
//        }
//    }
//    h=reverse(p);
//    //    display(h);
//    Node no=a;
//    while(no.next!=null)
//        no=no.next;
//    no.next=h;//add second part
//    return a;
//    }
//    return a;
//    }

```

```
public static void main (String[] args) throws java.lang.Exception
{
    //your code here
    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
    Node a=null;
    int arr[]=new int[n];
    for(int i=0;i<n;i++)
        arr[i]=s.nextInt();
    for(int i=n;i>0;i--)
        a=new Node(arr[i-1], a);
    Node b =reverse(a);
    int ans=com(a,b);
    if(ans==1)
        System.out.print("YES");
    else System.out.print("NO");
    }
}
```