

<https://course.acciojob.com/idle?question=c6f18527-8007-4ca5-b928-b9fc2db5f28f>

- MEDIUM

- Max Score: 40 Points

## Middle Node Of Linked List

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Given the head of a linked list, return the middle node of the linked list.

Linked List Structure:

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

Note:- You just need to complete `midpointOfLinkedList()` function and return the mid point. The driver code will print the second half of the linked list.

Example:

If your list is [5, 4, 3, 2], the function should return the node at index 2, i.e. value 3.

### Input Format

You will be provided with an integer  $n$ , the number of elements in the linked list.

The next  $n$  integers denote the values of the nodes in the linked list.

### Output Format

Print the linked list starting from the middle node.

## Example 1

Input

```
4
5 4 3 2
```

Output:

```
3 2
```

## Example 2

Input

```
3
5 7 1
```

Output:

```
7 1
```

## Constraints

$1 \leq n \leq 10^5$

### Topic Tags

- **Linked lists**

# My code

```
// n java
import java.util.*;
import java.lang.*;
```

```

import java.io.*;

public class Main
{
    public static void main (String[] args) throws
java.lang.Exception
    {
        //your code here
        Scanner sc=new Scanner(System.in);
        int n=sc.nextInt();
        linkedList l1=new linkedList();
        for(int i=0;i<n;i++)
        {
            l1.add(sc.nextInt());
        }
        l1.delete(n);
        l1.print();
    }
}
class Node
{
    int val;
    Node next;
    Node(int val)
    {
        this.val=val;
        this.next=null;
    }
}
class linkedList

```

```

{
    Node head;
    Node tail;
    public void add(int val)
    {
        Node n=new Node(val);
        if(head==null)
        {
            head=n;
            tail=n;
            return;
        }
        tail.next=n;
        tail=n;
    }
    public void delete(int n)
    {
        int count=1;
        int mid=(n/2)+1;
        Node temp=head;
        while(count!=mid)
        {
            temp=temp.next;
            count++;
        }
        tail=temp;
    }
    public void print()
    {
        Node temp=tail;
    }
}

```

```
while(temp!=null)
{
    System.out.print(temp.val+" ");
    temp=temp.next;
}
}
```