

<https://course.acciojob.com/idle?question=9391bb3a-b600-416a-a140-45647675ce52>

- MEDIUM

- Max Score: 40 Points

Remove Nth Node From End of List

Given the head of a linked list, remove the n th node from the end of the list and return its head.

Note: You just need to complete `removeNthFromEnd()` function and return the new head of the linked list.

Input Format

The first line contains two spaced integers k and n where k denotes the length of linked list and n denotes the n th Node from the end . Next line contains k spaced integers representing the Nodes of the List.

Output Format

Print the new Linked List .

Example 1

Input

```
6 2
1 2 3 4 5 6
```

Output

```
1 2 3 4 6
```

Explanation

2nd Node from the end is Node with value 5

We remove it and update the List : 1-> 2-> 3-> 4-> 6

Example 2

Input

```
5 4
7 6 5 4 3
```

Output

```
7 5 4 3
```

Explanation

4th Node from the end is Node with value 6

We remove it and update the list : 7-> 5-> 4-> 3

Constraints

$1 \leq k \leq 30$

$1 \leq \text{Node.val} < 100$

$1 \leq n \leq k$

Topic Tags

- **Linked lists**

My code

```

// n java
import java.io.*;
import java.util.*;
class Node
{
    int data;
    Node next;
    Node(int d) {data = d; next = null; }
}
class insertion
{
    Node head;
    Node tail;
    public void addToTheLast(Node node)
    {
        if (head == null)
        {
            head = node;
            tail = node;
        }
        else
        {
            tail.next = node;
            tail = node;
        }
    }
    void printList(Node head)
    {
        Node temp = head;
        while (temp != null)

```

```

        {
            System.out.print(temp.data+" ");
            temp = temp.next;
        }
        System.out.println();
    }
    /* Drier program to test above functions */

}
class Main
{
    public static void main(String args[])throws IOException
    {
        BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));

        String S[] = br.readLine().split(" ");
        int N = Integer.parseInt(S[0]);
        int n = Integer.parseInt(S[1]);

        String S1[] = br.readLine().split(" ");
        insertion llist = new insertion();
        int a1=Integer.parseInt(S1[0]);
        Node head= new Node(a1);
        llist.addToTheLast(head);
        for (int i = 1; i < N; i++)
        {
            int a = Integer.parseInt(S1[i]);
            llist.addToTheLast(new Node(a));
        }
    }
}

```

```
}
```

```
Solution ob = new Solution();  
    Node newhead=ob.removeNthFromEnd(llist.head, n);  
    llist.printList(newhead);  
}  
}
```

```
class Solution
```

```
{  
    public static Node removeNthFromEnd(Node head, int n) {  
        //Write your code here  
        Node r=head;  
        int c=0;  
        while(r!=null)  
        {  
            r=r.next;  
            c++;  
        }  
        n=c-n+1;  
        r=head;  
        if(n==1)  
            return r.next;  
        for(int i=1;i<n-1;i++)  
            r=r.next;  
        //now remove  
        r.next=r.next.next;  
  
        return head;  
}
```

}

}