https://course.acciojob.com/idle?question=bce0e6c5-34b2-4d11-a9f2-ec6e370d0196

- HARD
- Max Score: 50 Points

Swap Kth Nodes from End

Given a singly linked list of size `N`, and an integer `K`. You need to swap the `Kth` node from beginning and `Kth` node from end in linked list.

Note: You need to swap the nodes through the links and not changing the content of the nodes.

Input Format

The first line contains N, number of nodes in linked list and K, the nodes to be swapped.

The second line contains the elements of the linked list.

Output Format

Print the linked list in a new line.

Example 1

Input

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

Output

```
1 2 3 4 5
```

Explanation

Here k = 3, hence after swapping the 3rd node from beginning and end the new list will be 1 2 3 4 5.

Example 2

Input

```
4 4
1 2 3 4
```

Output

```
4 2 3 1
```

Explanation

Here k = 4, hence after swapping the 4th node from beginning and end the new list will be 4 2 3 1.

Constraints

```
1 <= N <= 10^3
```

```
1 < K < N
```

Topic Tags

- **Linked lists**
-

My code

```
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 void display(Node h)
  {
    Node p=h;
    while(p!=null)
     {
       System.out.print(p.data+" ");
       p=p.next;
     }
  }


    static Node swap(Node h,int m,int n)
  {
    Node a=h,b=null,p=a ,q=null, t=null,k=a;
    for(int i=1;i<m-1;i++)
              a=a.next;
     for(int i=1;i<n-m-1+1;i++)
              p=p.next;
    b=a.next;q=p.next;
    a.next=q;
    t=q.next;
    q.next=b.next;
    b.next=t;
    p.next =b;

    return k;
```

```
  }


        public static void main (String[] args) throws java.lang.Exception
        {
                //your code here
     Scanner s=new Scanner(System.in);
    Node a=null;

    int n=s.nextInt();
       int m=s.nextInt();
    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 h=swap(a,m,n);
  display(h);



        }
}
```