

<https://course.acciojob.com/idle?question=ac1af0fe-d5d6-4279-b47c-9787423ab256>

● EASY

● Max Score: 30 Points

Binary Tree Postorder Traversal

Given the `root` of a binary tree, return *the postorder traversal of its nodes values*.

Note: You just need to implement the `postorderTraversal()` function. Input and output have been handled in the driver code.

Input Format

First line contains a string representing the tree as described below.

The values in the string are in the order of level order traversal of the tree where, numbers denote node values, and a character "N" denotes NULL child.

Output Format

Print the postorder traversal of the tree.

Example 1

Input

```
6 5 6 1 1 N 6
```

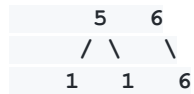
Output

```
1 1 5 6 6 6
```

Explanation

The given tree can be represented as:-

```
  6
 / \
```



The postorder traversal of the tree is :- 1 1 5 6 6 6

Example 2

Input

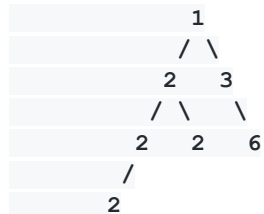
1 2 3 2 2 N 6 2 N N N N N N N

Output

2 2 2 2 6 3 1

Explanation

The given tree can be represented as: -



The postorder traversal of the tree is :- 2 2 2 2 6 3 1

Constraints

- The number of nodes in the tree is in the range $[0, 10^4]$.
- $-1000 \leq \text{Node.val} \leq 1000$
- The depth of the tree will not exceed 1000.

Topic Tags

- **Trees**

My code

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

class Node
{
    int data;
    Node next ,prev;

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

    Node() {}
}

public class Main
{
    static Node insert(Node root,int n)
    {
        if(root==null)
        {
            root=new Node(n,null,null);
            return root;
        }
    }
}
```

```

    }
    else if(n< root.data)
        root.prev= insert( root.prev, n);
    else if(n>root.data)
        root.next= insert( root.next, n);
    return root;
}

```

```

static void postorder(Node root)
{
    if(root !=null)
    {
        postorder(root.prev);
        postorder(root.next);
        System.out.print(root.data+" ");
    }
}

public static void main (String[] args) throws
java.lang.Exception
{
    //your code here
    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
    //int arr[]=new int[n];
    Node root=null;
    for(int i=0;i<n;i++)
    {
        int m=s.nextInt();
        root=insert( root, m);
    }
}

```

```
        postorder(root);  
    }  
}
```