

2148 - I2P(II) 2020_Chen_mid1_practiceScoreboard

Time		
2020/10/29 18:30:00	16:51:06	2020/11/05 18:30:00
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Clarification						
#	Problem	Asker	Description	Reply	Replier	Reply Time

OverviewProblem▼

12405 - Construct tree by inorder and postorderStatusLimitsSubmit

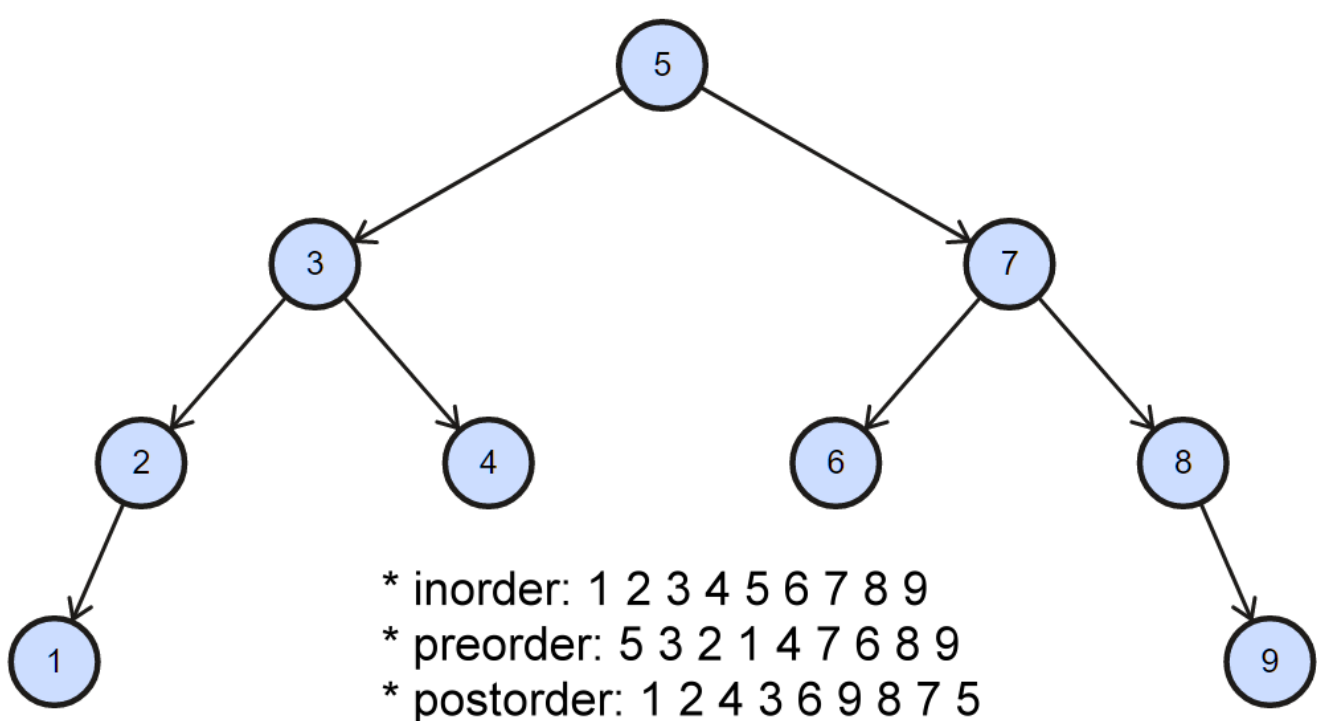
Description

We will give you the "inorder" and "postorder" of a tree.

You need to print the "preorder" of this tree we give you.

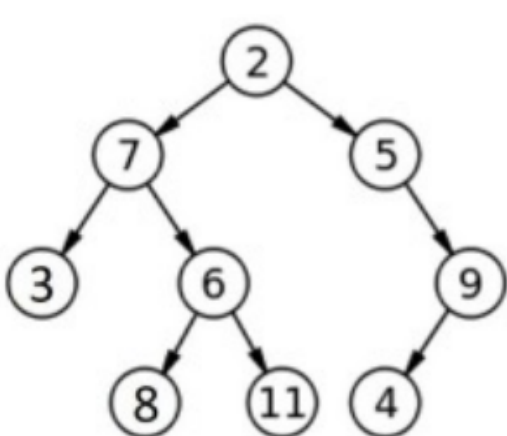
Notice that the the final testcase has small memory limit. If you don't free your tree you will get memory limit exceeded

When you just solve an inorder+postorder-to-preorder problem but there comes an inorder+preorder-to-postorder problem



(The tree for sample input 1)

- Inorder : 3 7 8 6 11 2 5 4 9
- Preorder : 2 7 3 6 8 11 5 9 4
- Postorder : 3 8 11 6 7 4 9 5 2



(The tree for sample input 2)

Input

There are multiple testcases. The testcases will end with **EOF**.

Each testcase contains three lines.

First line only contains one integer **n(1 <= n <= 100)** which means the number of nodes in the tree.

Second line contains **n** integers which in the range of `int`. Standing for the "inorder".

Third line contains **n** integers which in the range of `int`. Standing for the "postorder".

Output

For each testcase output the "preorder" of the tree.

You have to output in this form:

```
testcase<id>: <preorder sequence>
```

Replace <id> and <preorder sequence> into the i-th testcase and the correct preorder sequence.

Each number in preorder sequence should be followed by a single blank(even the last number).

If you have further questions, please refer to sample output.

Sample InputDownload

```
9
1 2 3 4 5 6 7 8 9
1 2 4 3 6 9 8 7 5
9
3 7 8 6 11 2 5 4 9
3 8 11 6 7 4 9 5 2
```

Sample OutputDownload

```
testcase1: 5 3 2 1 4 7 6 8 9
testcase2: 2 7 3 6 8 11 5 9 4
```

Discuss