1127. ZigZagging on a Tree (30)

时间限制
400 ms
内存限制
65536 kB
代码长度限制
16000 B
判题程序
Standard
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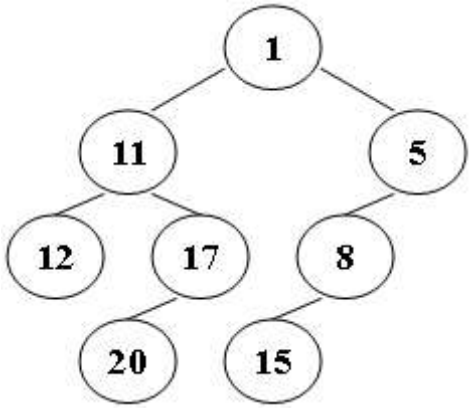
Suppose that all the keys in a binary tree are distinct positive integers. A unique binary tree can be determined by a given pair of postorder and inorder traversal sequences. And it is a simple standard routine to print the numbers in level-order. However, if you think the problem is too simple, then you are too naive. This time you are supposed to print the numbers in "zigzagging order" -- that is, starting from the root, print the numbers level-by-level, alternating between left to right and right to left. For example, for the following tree you must output: 1 11 5 8 17 12 20 15.



Input Specification:

Each input file contains one test case. For each case, the first line gives a positive integer N (<= 30), the total number of nodes in the binary tree. The second line gives the inorder sequence and the third line gives the postorder sequence. All the numbers in a line are separated by a space.

Output Specification:

For each test case, print the zigzagging sequence of the tree in a line. All the numbers in a line must be separated by exactly one space, and there must be no extra space at the end of the line.

Sample Input:

```
8
12 11 20 17 1 15 8 5
12 20 17 11 15 8 5 1
```

Sample Output:

```
1 11 5 8 17 12 20 15
```

提交代码
