

Question: [The traversal for BST]

Content:

“A” is the train that will go into station. “B” is the train leaves form station. But, the point C, is a **SMALL** station, can only stop a maximum of 5 carriages. Therefore, after leaving station, the train carriages number will be changed.

1. The train has N carriages ($N \leq 100$) which are numbered from 1 to N.
2. Every carriage only moves A->C and C->B. (No back! B->C or C-> A)
3. Before moving to C in sequence, the carriage can separate from other waiting carriages in order, and same as moving to side B

Input:

Input 2 sequences, 1st line is the “A” train, and 2nd is “B” train.

The carriages’ numbers are no-repeat, separated by space.

Output:

Your program need to check if the 2nd line can be formed by 1st line with C station.

Sample Input:

1 2 3 4 5

4 3 5 2 1

1 2 3 4 5 6 7 8 9 10

5 6 4 7 2 3 8 1 9 10

Sample Output:

Yes

No

