

## **Question:** [The Stacktrain]

### **Content:**

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

**Stack Rule: First in Last out.**

### **Input:**

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

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

### **Output:**

Your program need to check if the 2<sup>nd</sup> line can be formed by 1<sup>st</sup> 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

