

Problem I. Koishi Is Number One

Koishi found a positive integer sequence $a = [a_1, a_2, \dots, a_n]$ of length n on the road, satisfying $1 \leq a_i \leq n$. She then computed the **prefix maximum sequence** $b = [b_1, b_2, \dots, b_n]$, where b_i is the maximum of the first i elements of a :

$$b_i = \max\{a_1, a_2, \dots, a_i\} = \max_{1 \leq j \leq i} \{a_j\}$$

After obtaining both sequences, Koishi merged them together, defining a sequence c of length $2n$ as $c = [a_1, a_2, \dots, a_n, b_1, b_2, \dots, b_n]$, and **sorted c in non-decreasing order**.

Being the girl of the unconscious, Koishi lost the values of a and b , and only the sequence c remains.

Being the girl of the unconscious, Koishi has given the sequence c to you — the cutest college student of the 21st century — hoping that you can find any valid sequence a . There may be multiple valid sequences; you only need to output any one of them. There may also be no valid sequence, in which case you should report that no solution exists.

Input

The first line contains an integer T — the number of test cases. The next T sections each describe one test case:

- The first line contains an integer n — the length of sequence a .
- The second line contains a sequence c of length $2 \times n$, with adjacent integers separated by spaces. It is guaranteed that c is non-decreasing and $1 \leq c_i \leq n$.

It is guaranteed that $1 \leq \sum n \leq 3 \times 10^5$.

Output

For each test case:

- If a solution exists, print “Yes” on the first line, then output n integers $[a_1, a_2, \dots, a_n]$ on the second line, separated by spaces.
- If no solution exists, print “No” on a single line.

“Yes” and “No” are case-insensitive. For example, “Yes”, “YES”, “yEs” are all accepted as positive answers, and “No”, “NO”, “nO” are all accepted as negative answers.

Example

standard input	standard output
5	Yes
3	1 2 3
1 1 2 2 3 3	No
3	Yes
1 1 1 1 2 3	1 1 4 5 1 4
6	No
1 1 1 1 1 4 4 4 5 5 5 5	Yes
5	9 9 8 2 4 4 3 5 3
1 1 1 2 3 4 5 5 5 5	
9	
2 3 3 4 4 5 8 9 9 9 9 9 9 9 9 9 9 9	