Palindrome Array

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Given a number N and an array A of N numbers. Determine if it's **palindrome** or **not**.

Note:

An array is called **palindrome** if it reads the same backward and forward, for example, arrays **1** and **1,2,3,2,1** are **palindromes**, while arrays **1,12** and **4,7,5,4** are **not**.

NOTE: Solve it using recursion.

Input

First line contains a number N ($1 \leq N \leq 10^5$) number of elements.

Second line contains N numbers ($1 \leq A_i \leq 10^9$).

Output

Print "**YES**" (without quotes) if A is a **palindrome** array, otherwise, print "**NO**" (without quotes).

Examples

standard input	standard output
5 1 3 2 3 1	YES
4 1 2 3 4	NO