Time limit: 1.0s Memory limit: 256M

Ren Ashbell is often called the Strongest Blade Dancer. You have doubts that this is not actually true. Given the power level of N people, determine whether Ren Ashbell is the strongest (her power level is strictly greater than the power levels of all other people).

Input Specification

The first line of input will have N.

The next N lines of input will each have the power level of a person, a positive integer no more than 10 000. The first of these lines will be Ren Ashbell's power level.

Output Specification

The first and only line of output should be YES if Ren Ashbell is the strongest or NO if Ren Ashbell is not the strongest.

Constraints

 $2 \leq N \leq 10$

Sample Input

3	
9001	
8888	
1324	

Sample Output

YES