Problem B. Permutation Check

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

You are given a sequence of N integers between 1 and N (inclusive): $A = (A_1, A_2, \ldots, A_N)$.

Determine whether A is a permutation of $(1, 2, \ldots, N)$.

Constraints

- $1 \leq N \leq 10^3$
- $1 \leq A_i \leq N$
- All values in input are integers.

Input

Input is given from Standard Input in the following format:

```
N
A_1 A_2 ... A_N
```

Output

If A is a permutation of $(1, 2, \ldots, N)$, print `Yes`; otherwise, print `No`.

Sample 1

Input	Output
5 3 1 2 4 5	Yes

$(3, 1, 2, 4, 5)$ is a permutation of $(1, 2, 3, 4, 5)$, so we should print `Yes`.

Sample 2

Input	Output
6 3 1 4 1 5 2	No

$(3, 1, 4, 1, 5, 2)$ is not a permutation of $(1, 2, 3, 4, 5, 6)$, so we should print `No`.

Sample 3

Input	Output
3 1 2 3	Yes

Sample 4

Input	Output
1 1	Yes