Problem D. Composite Sequence

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	256 mebibytes

A sequence S of positive integers is a *composite sequence* if and only if there is a non-empty subsequence T of S such that the sum of all integers in T is a composite number.

Given S, your task is to check whether S is a composite sequence.

Note that 1 is not a composite number.

Recall that T is a subsequence of S if and only if we can obtain T by removing some elements of S (possibly none or all).

Input

The first line contains a single integer n ($1 \le n \le 10^5$), the size of S.

The second line contains n integers $S_1, S_2, \ldots, S_n$: the elements of S ($1 \le S_i \le 10^9$).

Output

If S is a composite sequence, output "`Yes`". Otherwise, output "`No`".

Examples

standard input	standard output
2 5 7	Yes
1 97	No