

Forbidden Set

Input file: *standard input*
Output file: *standard output*
Time limit: 2 seconds
Memory limit: 512 mebibytes

A set of decimal digits is given. Find the smallest prime number that has the following property: in the decimal representation of this number, **none** of the digits belong to the given set.

For example, if the set is $\{0, 6, 3, 9\}$, then the prime 71 satisfies the requirement of the problem (except, perhaps, minimality), while the prime number 101 does not (it contains the digit 0 which is in the set).

Input

The first line of the input contains a single integer n : the number of digits in the set ($1 \leq n \leq 10$). Each of the following n lines contains a single integer d_i ($0 \leq d_i \leq 9$): the next element of the set. It is guaranteed that all d_i are pairwise distinct.

Output

If there are no primes without any digits from the given set in their decimal representation, output -1 . Otherwise, output the smallest such prime.

Examples

<i>standard input</i>	<i>standard output</i>
7 0 1 2 4 6 8 9	3
9 0 1 2 3 5 6 7 8 9	-1