Problem E. Huge products

Input file: stdin
Output file: stdout
Time limit: 1 second
Memory limit: 512 megabytes

bobo has a lot of integers. Frankly, he has a_1 number of 1, a_2 number of 2, ..., a_{10} number of 10.

Today, bobo would like to pick some of the numbers and calculate their product (If none of the numbers are chosen, the product is defined as 1). bobo is curious about the number of different products he can obtain, modulo $(10^9 + 7)$.

Input

10 integers $a_1, a_2, \ldots, a_{10} \ (0 \le a_i \le 10^9)$.

Output

A single integer denotes the number of products.

Sample input and output

stdin	stdout
0 1 0 1 0 0 0 1 0 0	7
0 1000000000 1000000000 0 0 0 0 0 0	40000001