## 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 $2, \ldots, a_{10}$ 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 $\left(10^{9}+7\right)$.

## Input

10 integers $a_{1}, a_{2}, \ldots, a_{10}\left(0 \leq a_{i} \leq 10^{9}\right)$.

## Output

A single integer denotes the number of products.

## Sample input and output

| stdin |  | stdout |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| 0 | 1000000000 | 100000000 | 0 | 0 | 0 | 0 | 0 |

