E. Sereja and Subsequences

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Sereja has a sequence that consists of n positive integers, $a_1, a_2, ..., a_n$.

First Sereja took a piece of squared paper and wrote all **distinct** non-empty non-decreasing subsequences of sequence a. Then for each sequence written on the squared paper, Sereja wrote on a piece of lines paper all sequences that *do not exceed* it.

A sequence of positive integers $x = x_1, x_2, ..., x_r$ doesn't exceed a sequence of positive integers $y = y_1, y_2, ..., y_r$, if the following inequation holds: $x_1 \le y_1, x_2 \le y_2, ..., x_r \le y_r$.

Now Sereja wonders, how many sequences are written on the lines piece of paper. Help Sereja, find the required quantity modulo 1000000007 $(10^9 + 7)$.

Input

The first line contains integer n $(1 \le n \le 10^5)$. The second line contains n integers $a_1, a_2, ..., a_n$ $(1 \le a_i \le 10^6)$.

Output

In the single line print the answer to the problem modulo 1000000007 $(10^9 + 7)$.

Examples

input
1 42
output
42

input
3 1 2 2
output
13

input
5 1 2 3 4 5
output
719