+ and × with a sugar

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	1024 megabytes

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The background story in the Chinese statements is removed due to the translation difficulties. >_<

Little Cyan Fish has a sequence of n positive integers $a_1, a_2, \cdots, a_n$. Oscar Tang told Little Cyan Fish: "I want you to divide this sequence into several contiguous segments, where the profit of each segment is the product of all elements within that segment, and your task is to maximize the sum of all segment profits."

Little Cyan Fish found this problem quite challenging. Therefore, Little Cyan Fish hopes that you will provide the answer modulo $(10^9 + 7)$ and tell him the result.

Input

Each test case contains multiple sets of test data. The first line of input contains an integer T ($1 \leq T \leq 2 \times 10^5$), indicating the number of test data sets.

For each test data set:

- The first line contains a positive integer n ($1 \leq n \leq 2 \times 10^5$), which is the length of the sequence.
- The second line contains n positive integers $a_1, a_2, \ldots, a_n$ ($1 \leq a_i \leq 10^9$).

It is guaranteed that the total sum of n across all test data sets does not exceed 2×10^5.

Output

For each test data set, output a single line containing an integer, representing the answer requested by Little Blue Fish, taken modulo $(10^9 + 7)$.

Example

standard input	standard output
3 4 2 3 3 3 5 1 2 1 2 1 6 1 1 4 5 1 4	54 7 82