Problem 3. Longest bitonic subsequence (2 points)

Timelimit: 1 second

Problem Statement

Longest bitonic subsequence problem is the problem to find a longest subsequence of a given sequence in which if it is first strictly increasing, then srictly decreasing.

Write a program that find number of longest bitonic subsequence.

(Be careful about range of number)

Input Statement

First line contains t which is the number of test cases.

First line of each test case contains n which is the size of sequence $(n \le 1,000)$.

And next line contain the input sequence.

Output Statement

For each test case, prints out $number of longest non-decreasing subsequence \mod 20170429$. Each test case should be separated by a line.

Input Example

 $\begin{array}{c} 4 \\ 5 \\ 1 \ 2 \ 3 \ 4 \ 5 \\ 5 \\ 1 \ 1 \ 1 \ 1 \ 1 \\ 4 \\ 1 \ 5 \ 2 \ 6 \\ 6 \\ 1 \ 3 \ 2 \ 6 \ 5 \ 7 \end{array}$

Output Example

5

3

6