

There are n caves in jungle and there are multiple direct paths from one cave to next cave.

Number of direct paths are given in an array.

Example array: [a1, a2, a3,...]

First element of array corresponds to number of direct paths from cave 0 to 1, second element corresponds to number of direct paths from cave 1 to 2 and so on.

King of the jungle wants to go from cave 0 to last. Calculate how many paths are there from cave 0 to last modulo 1234567.

Constraints:

$1 \leq t \leq 1000$

$2 \leq n \leq 100$

$1 \leq a_i \leq 1000$

Input format:

First line contains an integer t, then for t test cases:

First line have integer n, number of caves and second line contains an array containing number of direct paths from one cave to next cave.

Output format:

One integer containing number of paths from cave 0 to last modulo 1234567.

Sample Input:

1

4

2 2 2

Sample Output:

8