Cities on a map are connected by a number of roads. The number of roads between each city is in an array and city is the starting location. The number of roads from city to city is the first value in the array, from city to city is the second, and so on.

How many paths are there from city to the last city in the list, modulo ?

Example

There are roads to city , roads to city and roads to city . The total number of roads is .

Note

Pass all the towns Ti for i=1 to n-1 in numerical order to reach Tn.

Function Description

Complete the connectingTowns function in the editor below.

connectingTowns has the following parameters:

int n: the number of towns

int routes[n-1]: the number of routes between towns

Returns

Int: the total number of routes, modulo 1234567.

Input Format

The first line contains an integer T, T test-cases follow.

Each test-case has 2 lines.

The first line contains an integer N (the number of towns).

The second line contains N – 1 space separated integers where the ith integer denotes the number of routes, Ni, from the town Ti to Ti+1

Constraints

1 <= T<=1000

2< N <=100

1 <= routes[i] <=1000

Sample Input

2

3

1 3

4

2 2 2

Sample Output

3

8

Explanation

Case 1: 1 route from T1 to T2, 3 routes from T2 to T3, hence only 3 routes.

Case 2: There are 2 routes from each city to the next, hence 2 \* 2 \* 2 = 8.

Submissions: 181

Max Score: 10

Difficulty: Easy

Rate This Challenge:

More

1

#!/bin/python3

2

3

Import math

4

Import os

5

Import random

6

Import re

7

Import sys

8

9

#

10

# Complete the ‘connectingTowns’ function below.

11

#

12

# The function is expected to return an INTEGER.

13

# The function accepts following parameters:

14

# 1. INTEGER n

15

# 2. INTEGER\_ARRAY routes

16

#

17

18

Def connectingTowns(n, routes):

19

# Write your code here

20

R=1

21

For I in routes:

22

R \*=i

23

Return r%1234567

24

T = int(input())

25

For \_ in range(t):

26

N = int(input())

27

Routes = list(map(int, input().split()))

28

Result = connectingTowns(n, routes)

29

Print(result)

30

Line: 24 Col: 1

Run Code Submit CodeUpload Code as File

Test against custom input

Testcase 0

Congratulations, you passed the sample test case.

Click the Submit Code button to run your code against all the test cases.

Input (stdin)

2

3

1 3

4

2 2 2

Your Output (stdout)

3

8

Expected Output

3

8