

# SUMMATION

You are given an array of integer. You have to find the sum of all possible subsequences sum of the array. For example: The given array of length  $n = 3$  is  $\{1,2,3\}$ . All the sequence of this array with the corresponding array Summations are:

Subsequence	Summation
{}	0
{1}	1
{2}	2
{3}	3
{1,2}	3
{1,3}	4
{2,3}	5
{1,2,3}	6
Total	24

The answer is 24.

## Input

The first line of input will contain the test case  $T$  ( $1 \leq T \leq 10$ ). There will be two lines for each test case. First line will contain the value of  $n$  ( $1 \leq n \leq 1000$ ) and the next line will contain the array elements space separated integers. Each integer will be between 1 and 1000000000.

## Output

For each case of input, output the answer of the problem in the format "**Case X: Y**" where **X** denotes the number of test case and **Y** denotes the answer. Answer could be very large so output the answer modulo **100000007**.

## Example

**Input:**

2

3

1 2 3

3

4 1 2

**Output:**

Case 1: 24

Case 2: 28