# Problem 2. $B_N$

Time Limit : 1 second
Memory Limit : 128 megabytes

## Description

A bright student, Ri Gi Ung, is good at physics very much but not mathematics.

His friend, Sin Yong Jin, is the reverse – he is good at mathematics and not physics.

So Ri helps Sin's physics homework and Sin helps Ri's mathematics homework.

Unfortunately, today Ri got a very very difficult mathematics problem and he asked Sin to solve the problem.

But today Sin is very busy, so he also asked you to solve it.

You, the best friend of Sin, must solve it.

The problem is follows.

"An integer array $\{A_1, A_2, \ldots, A_n\}$ is given.

New integer array $\{B_1, B_2, \ldots, B_N, \ldots,\}$ is defined as the following formula.

$$B_N = \left( \sum_{\substack{i_1+i_2+\cdots+i_k=N \\ 1 \le k \le N}} A_{i_1} A_{i_2} \cdots A_{i_k} \right) \% \, 1000000007$$

Of course, $1 \le i_1, i_2, \cdots, i_k \le n$. It is possible that $u \ne v$ and $i_u = i_v$.

For example, $B_3 = A_1 * A_1 * A_1 + A_1 * A_2 + A_2 * A_1 + A_3$.

You must calculate $B_N$ for given integer $N$."

Can you help two boys?

## Input

The first line of input file contains one integer $T$ – indicating the number of test cases.

The first line of each test case contains two integers $n$ and $N$.

$(1 \leq n \leq 100, 1 \leq N \leq 100)$

The next line of each case contains $n$ integers separated by a space.

## Output

You must print one integer – result of the problem.

## Sample Input

```
1
2 5
3 2
```

## Sample Output

```
495
```