

Problem B. B

Time limit 1000 ms

Mem limit 65536 kB

In a strange shop there are n types of coins of value $A_1, A_2 \dots A_n$. You have to find the number of ways you can make K using the coins. You can use any coin at most K times.

For example, suppose there are three coins 1, 2, 5. Then if $K = 5$, the possible ways are:

1. (1, 1, 1, 1, 1)
2. (1, 1, 1, 2)
3. (1, 2, 2)
4. (5)

So, 5 can be made in 4 ways.

Input

Input starts with an integer T (≤ 100), denoting the number of test cases.

Each case starts with a line containing two integers n ($1 \leq n \leq 100$) and K ($1 \leq K \leq 10000$). The next line contains n integers, denoting $A_1, A_2 \dots A_n$ ($1 \leq A_i \leq 500$). All A_i will be distinct.

Output

For each case, print the case number and the number of ways K can be made. Result can be large, so, print the result modulo **100000007**.

Sample

Input	Output
2 3 5 1 2 5 4 20 1 2 3 4	Case 1: 4 Case 2: 108