

## 1231 – Coin Change (I)

In a strange shop there are  $n$  types of coins of value  $A_1, A_2 \dots A_n$ .  $C_1, C_2, \dots C_n$  denote the number of coins of value  $A_1, A_2 \dots A_n$  respectively. You have to find the number of ways you can make  $K$  using the coins.

For example, suppose there are three coins 1, 2, 5 and we can use coin 1 at most 3 times, coin 2 at most 2 times and coin 5 at most 1 time. Then if  $K = 5$  the possible ways are:

1112  
122  
5

So, 5 can be made in 3 ways.

### Input

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

Each case starts with a line containing two integers  $n$  ( $1 \leq n \leq 50$ ) and  $K$  ( $1 \leq K \leq 1000$ ). The next line contains  $2n$  integers, denoting  $A_1, A_2 \dots A_n, C_1, C_2 \dots C_n$  ( $1 \leq A_i \leq 100, 1 \leq C_i \leq 20$ ). 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 for Sample Input
2 3 5 1 2 5 3 2 1 4 20 1 2 3 4 8 4 2 1	Case 1: 3 Case 2: 9