Diet

Usually Ivancho likes eating junk food, but today is not an ordinary day. After paying a visit to the doctor, Ivancho is motivated to eat healthy. His doctor has recommended a variety of fruits for Ivancho telling him when to **NOT** take each one of them.

Ivancho needs to assemble a diet on his own using the doctor's recommendations and each day taking a unique fruit but first he wants to know in how many different ways a diet can be assembled by the rules stated.

Now Ivancho asks you to help him with the task at hand by writing a program **diet** which, by a given number of days and the doctor's recommendations, tells the number of different ways to form a diet.

Output: The first row of the input file **diet.in** contains a number **N** – the number of days and the number of fruits. On the following **N** rows are the doctor's recommendations for each individual fruit – a number **K** followed by **K** numbers, showing which days the corresponding fruit cannot be eaten.

Output: The output file **diet.out** should contain one integer – the number of different ways to form a diet from the input data.

Limits:
4 <= N <= 10
0 <= K <= N

Time limit: 1 сек
Memory limit: 256 MB

Preliminary tests: 4
Final tests: 10

Sample test:

diet.in	diet.out
3 2 2 3 1 1 1 1	2

Explanation:
We can't take the first fruit on the second nor the third day, so we take it on the first one. We can't take the second fruit on the first day so we can take it on the second or the third day. If we take it on the second day, we'll take the third one on the third day – this is the first way to make a diet out of the sample data.
If we take the second fruit on the third day, we'll take the third fruit on the second day – this is the second way to form a diet.