ASSIGN - Assignments

#dynamic-programming

Problem

Your task will be to calculate number of different assignments of n different topics to n students such that everybody gets exactly one topic he likes.

Input

First line of input contains number of test cases c (1<=c<=80). Each test case begins with number of students n (1<=n<=20). Each of the next n lines contains n integers describing preferences of one student. 1 at the ith position means that this student likes ith topic, 0 means that he definitely doesn't want to take it.

Output

For each test case output number of different assignments (it will fit in a signed 64-bit integer).

Added by:	gawry
Date:	2005-10-08
Time limit:	2.997s
Source limit:	50000B
Memory limit:	1536MB
Cluster:	Cube (Intel G860)
Languages:	All except: NODEJS PERL6 VB.NET

Vote requirements

Example

```
Input:
3
3
1 1 1
1 1 1
1 1 1
11
1 0 0 1 0 0 0 0 0 1 1
1 1 1 1 1 0 1 0 1 0 0
1 0 0 1 0 0 1 1 0 1 0
1 0 1 1 1 0 1 1 0 1 1
0 1 1 1 0 1 0 0 1 1 1
1 1 1 0 0 1 0 0 0 0 0
0 0 0 0 1 0 1 0 0 0 1
1 0 1 1 0 0 0 0 0 0 1
0 0 1 0 1 1 0 0 0 1 1
1 1 1 0 0 0 1 0 1 0 1
1 0 0 0 1 1 1 1 0 0 0
11
0 1 1 1 0 1 0 0 0 1 0
0 0 1 1 1 1 1 1 1 1 1
1 1 0 1 0 0 0 0 0 1 0
0 1 0 1 0 1 0 1 0 1 1
1 0 0 1 0 0 0 0 1 0 1
0 0 1 0 1 1 0 0 0 0 1
1 0 1 0 1 1 1 0 1 1 0
1 0 1 1 0 1 1 0 0 1 0
0 0 1 1 0 1 1 1 1 1 1
0 1 0 0 0 0 0 0 0 1 1
0 1 1 0 0 0 0 0 1 0 1

Output:
6
7588
7426
```

- ✔ be spoj user for at least 5 days
- ✔ solve at least 15 problems
- ✖ solve this problem

Own tags

#data-structures-11 #digit-dp-16 # # # #

Tag name Add