

## SPOJ Problem Set (classical)

### 423. Assignments

Problem code: ASSIGN



#### 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  $c$  ( $1 \leq c \leq 80$ ). Each test case begins with number of students  $n$  ( $1 \leq n \leq 20$ ). Each of the next  $n$  lines contains  $n$  integers describing preferences of one student. 1 at the  $i$ th position means that this student likes  $i$ th 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).

#### 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