

### 12. WZB' s Harem

Timelimit: 1000MS Memorylimit: 64M

#### Problem Description:

Do you remember N-queens? Today, WZB accompanied his n queens to the cinema.....

As the saying goes: Three queens for a play, one harem admits of no two queens...

Cinema uses n rows of seats, each row has n columns. Queens are grumpy, they're not willing to sit in the same row or same column with other queen, if there are two queens in the same row or same column they conflict occurs, so they make WZB arrange seats for them. It stumped WZB to avoid the queen make antinomy. WZB wants to know how many different arrangements there are for the queen, he'd like to choose one for them.

Since WZB and his queens arrived late, some seats had already been reserved by others. Although WZB is a king, he can't infringe on the rights of citizens, so the reserved seats could not be reserved for queens.

Now WZB has ordered you to work out how many ways to arrange the queen. If WZB finds out your calculations are wrong....

#### Input requirements:

There is an integer  $n(n \leq 20)$  in the first line. The cinema has n rows and n columns of seats.

In the next lines, there are n integers in each line (0 or 1). If the point (i,j) is 1, it means it has been booked.

#### Output requirements:

One integer. You just need to print the answer Mod 1000000007.

#### Sample input:

```
2
0 0
0 0
```

#### Sample output:

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4
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