

## Problem 3. Party (2 points)

**Timelimit: 1 second**

### Problem Statement

There are  $n$  students attending the class that Professor Octopus teaches. He wants to invite as many of them as possible for a party at his place, subject to two constraints:  
each invitee should have

1. at least  $k$  other invitees whom he knows, and
2. at least  $k$  other invitees whom he does not know.

Write a program that takes known relationship between students, and outputs best selection of invitees.

### Input Statement

First line contains  $t$  which is the number of test cases.

First line of each test case contains two integers  $n$  and  $k$  ( $0 \leq k \leq n$ ,  $1 \leq n \leq 1,000$ ).

Following  $n$  lines contains  $n$  by  $n$  matrix  $M$  which represents known relationship between students.

We denotes the value on  $j$ -th number of  $i$ -th line as  $M_{ij}$ .

$M_{ij}$  is 1 if  $i$ -th student and  $j$ -th student know each other, and 0 otherwise.

$M_{ii}$  is always 0.

### Output Statement

For each test case, output the number of invitees for the best selection.

### Input Example

```
2
5 1
0 1 1 1 1
1 0 1 0 1
1 1 0 1 0
1 0 1 0 1
1 1 0 1 0
10 3
0 0 1 0 0 1 0 0 0 1
0 0 0 1 0 0 0 1 1 0
1 0 0 1 0 0 0 0 1 0
0 1 1 0 1 0 0 1 0 0
0 0 0 1 0 1 0 0 1 0
1 0 0 0 1 0 1 0 0 0
0 0 0 0 0 1 0 0 0 1
0 1 0 1 0 0 0 0 1 0
0 1 1 0 1 0 0 1 0 1
1 0 0 0 0 0 1 0 1 0
```

### Output Example

```
4 // student 2,3,4,5
0
```