Problem B
Alice's Party

Problem Description

Alice wants to throw a party and is deciding whom to invite. She has n people to choose from, and she has made up a list of which pairs of these people know each other. She wants to pick as many people as possible, subject to two constraints:

1. At the party, each person should have at least two other people whom they know, and

2. at least two other people whom they don't know.

Write a program that takes as input the number of people n and the list of pairs who know each other. Your program should output the maximum number of people in the party that meets the above two constraints.

Input Format

For each test case, the first line contains an integer n indicating the number of people, $5 \le n \le 30$. Assume that each person is numbered by an integer i, $1 \le i \le n$. The subsequent n lines containing n numbers in each line. They indicate the pairs of people who know each other or not. The number is either 0 or 1. If person i knows person j, then the j-th number in the i-th line is 1; otherwise 0. The last line of the input file contains 0, indicating the end of input.

Output Format

Print the maximum number of people in the party that meets the above two constraints. In the cases that no people meets the constraints your program should print '0'. The output of each test case should be printed in a line.

Sample Input

```
5
1 1 0 1 1
1 1 1 0 0
0 1 1 1 0
1 0 1 1 1
1 0 0 1 1
6
1 1 0 0 1 1
1 1 1 0 0 0
0 1 1 1 0 1
0 0 1 1 1 1
1 0 0 1 1 1
1 0 1 1 1 1
0
```

Sample Output

```
0
5
```