A. Levko and Table

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Levko loves tables that consist of n rows and n columns very much. He especially loves beautiful tables. A table is *beautiful* to Levko if the sum of elements in each row and column of the table equals k.

Unfortunately, he doesn't know any such table. Your task is to help him to find at least one of them.

Input

The single line contains two integers, n and k ($1 \le n \le 100$, $1 \le k \le 1000$).

Output

Print any beautiful table. Levko doesn't like too big numbers, so all elements of the table mustn't exceed 1000 in their absolute value.

If there are multiple suitable tables, you are allowed to print any of them.

Examples

input
2 4

output
1 3 3 1

input
4 7

output
2 1 0 4 4 0 2 1 1 3 3 0 0 3 2 2

Note

In the first sample the sum in the first row is $1 + 3 = 4$, in the second row — $3 + 1 = 4$, in the first column — $1 + 3 = 4$ and in the second column — $3 + 1 = 4$. There are other beautiful tables for this sample.

In the second sample the sum of elements in each row and each column equals 7. Besides, there are other tables that meet the statement requirements.

Codeforces Round #210 (Div. 2)
Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags

constructive algorithms implementation

No tag edit access

→ Contest materials

- Announcement
- Tutorial