E. Square Table

time limit per test: 1 second memory limit per test: 256 megabytes

input: standard input output: standard output

While resting on the ship after the "Russian Code Cup" a boy named Misha invented an interesting game. He promised to give his quadrocopter to whoever will be the first one to make a rectangular table of size $n \times m$, consisting of positive integers such that the sum of the squares of numbers for each row and each column was also a square.

Since checking the correctness of the table manually is difficult, Misha asks you to make each number in the table to not exceed 10^8 .

Input

The first line contains two integers n and m ($1 \le n, m \le 100$) — the size of the table.

Output

Print the table that meets the condition: n lines containing m integers, separated by spaces. If there are multiple possible answers, you are allowed to print anyone. It is guaranteed that there exists at least one correct answer.

Examples

input		
1 1		
output		
1		

input		
1 2		
output		
3 4		