Prime Matrix

Time Limit 1 second

Problem

A Prime Matrix is defined as an n×n square matrix satisfying:

- All numbers in the matrix are positive integers, and
- The numbers in each row are distinct, and
- The numbers in each column are distinct, and
- The sum of numbers in each row is a prime number, and
- The sum of numbers in each column is a prime number.

There may be multiple valid prime matrices out there, but you don't want the numbers in the matrix to be too large. Given a bound b, can you find a prime matrix so that it contains only integers between 1 and b?

Input

The input has a single line with two integers: n ($2 \le n \le 50$) and b ($2 \le b \le 10^9$).

Output

Output any valid n×n prime matrix. The output must have n rows. Each row must have n space-separated integers between 1 and b without leading zeroes. If no such matrix exists, output "impossible".

Sample Input 1	Sample Output 1
2 2	1 2 2 1

Sample Input 2	Sample Output 2
3 3	impossible