

Problem D. Multiple Subject Lessons

Time limit: 1 second
Memory limit: 512 megabytes

Kate's school has introduced multiple subject lessons.

The students have the following task for the lesson of Math, Art and Sociology in the seventh grade. They are given an integer n . Each student has a set of k colored pencils, let the colors be numbered from 1 to k . Each student takes a sheet of paper and writes down one or several integers on it, so that their sum was equal to n . Each integer is written using one of the pencils, so it has one of the k possible colors.

The students must agree to do the task in such way that there are no two students with the same solution. Two solutions are the same if for each integer a and each color i the number of integers a of color i at student's sheets is the same.

The teacher of Math is sure that the students will be able to complete the task. However, she wants to know how many solutions are there, maybe there are not enough for all the students to have different solutions. Help her to find that out!

Input

The input contains two integers n and k ($1 \leq n, k \leq 15$).

Output

Print one integer — the number of solutions to the task.

Example

standard input	standard output
3 2	10

Note

The following picture shows all possible ways to solve the task in the first sample test. Note that the order of integers written doesn't matter, only the number of integers written with each color.

