Task. Increasing sequences

We consider a sequence of length n composed of different integers taken from the range of 1 till k. Write program **seq** that finds the count of all sequences described above, in which elements are in increasing order.

Input: The values of the two integers k and n, separated by a space.

Output: One integer equal to the required count.

Contraints: 0 < k < 50, 0 < n < 50.

Example

Input

4 3

Output

4

Explanation: There are 4 sequences for the input data of the example and the they are: 1,2,3; 1,2,4; 1,3,4; 2,3,4.