1997/98 ACM International Collegiate Programming Contest  
University of Ulm Local Contest

# Problem B

# Binomial Showdown

Source file: binomial.(c|C|pas)  
Input file: binomial.in

In how many ways can you choose *k* elements out of *n* elements, not taking order into account?   
Write a program to compute this number.

### Input Specification

The input file will contain one or more test cases.   
Each test case consists of one line containing two integers *n* (*n*>=1) and *k* (0<=*k*<=*n*).   
Input is terminated by two zeroes for *n* and *k*.

### Output Specification

For each test case, print one line containing the required number. This number will always fit into an integer, i.e. it will be less than 231.

**Warning:** Don't underestimate the problem. The result will fit into an integer - but if all intermediate results arising during the computation will also fit into an integer depends on your algorithm. The test cases will go to the limit.

### Sample Input

4 2

10 5

49 6

0 0

### Sample Output

6

252

13983816