530 Binomial Showdown

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 ($n \geq 1$) and k ($0 \leq k \leq n$).

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 2^{31}.

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
```