Mazen and Combinations

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Mazen faced a problem that he could not solve in the last contest in which he participated, so he asked you to solve that problem for him.

The problem was that you were given two integers n and r and you were asked to count the number of digits for $\binom{n}{r}$

Input

The first line contains t -($1 \le t \le 100$)- number of test cases.

For each test case you are given n and r -($1 \le r \le n \le 10^4$).

Output

For each test case output the value of $\binom{n}{r}$.

Example

standard input	standard output
3	3
15 3	2
10 2	1
7 7	

Note

$$^nC_r = \frac{n!}{r!\,(n-r)!}$$