

Ice Cream

Input file: **standard input**
Output file: **standard output**
Time limit: 3 seconds
Memory limit: 256 megabytes

Meow loves to eat ice cream. He will always have an ice cream in his hand every day. There are a lot of flavours like vanilla, chocolate, durian and so on.

One day, he tries to have multiple scoops of ice cream on one stick. He suddenly thought of how many combinations can he makes if he chooses r numbers of scoops from n different flavour. The flavours can be repeated. For example, if he needs to choose 3 scoops, it can be vanilla, vanilla, vanilla; vanilla, vanilla, chocolate and so on. Help Meow calculate the numbers of combination that he can make, note that the order of the flavour taken is not important.

Input

The first line contains a single integer t ($1 \leq t \leq 1000$) – the number of test cases

Each test case contains a line with 2 integers n and r ($1 \leq n, r \leq 1000$), denoting the total number of different flavour and number of ice cream scopes to be taken, respectively.

Output

Output the possible number of variations of flavours for the ice-cream. Note that the output may be very big and may exceed 2^{64}

If the case is impossible, output 0 as the answer.

Example

standard input	standard output
3	10
4 2	20
4 3	715
10 4	

Note

For the first test case, assume the 4 flavours are 'a', 'b', 'c', 'd'.

Meow can take aa, ab, ac, ad, bb, bc ,bd, cc, cd, dd, making total of 10 different variations.