**nPr**

[maths](http://www.practice.geeksforgeeks.org/tag-page.php?tag=maths&isCmp=0)

Write a program to calculate nPr. nPr represents n permutation r and value of nPr is (n!) / (n-r)!.

**Input:**The first line of the input contains T denoting the number of testcases. First line of the test case will be the value of n and r respectively.  
**Output:**For each test case output will be the value of nPr.  
**Constraints:**

1 <=n,r<= 20

n>=r

**Example:**

Input:

2  
2 1  
10 4

Output:

2

5040

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=328>

-----------------PYTHON------------------

def **factorial**(N):

fact = 1

for i in range(2, N + 1):

fact \*= i

return fact

t = int( raw\_input())

while t > 0:

input = raw\_input().split(*' '*)

n = int(input[0])

r = int(input[1])

#print str(n) + " " + str(r)

print factorial(n)/factorial(n-r)

t-=1