

Candy Combinations

There is a bag filled with candies. Each candy has a different color. John can pick a given number of candies from the bag. He wants to know how many combinations he can get.

Example:

The bag has 5 candies red, green, blue, yellow and orange. John can pick 3 candies. He can get 10 combinations

```
R G B
R G Y
R G O
R B Y
R B O
R Y O
G B Y
G B O
G Y O
B Y O
```

You are given the number of pills in the bag (***N***) and the number of candies John can pick (***R***). You have to output the number of combinations he can get.

You can use the following formula to calculate the number of combinations:

$$1 \times 2 \times 3 \times \dots (N - 1) \times N / \{(1 \times 2 \times 3 \times \dots (R - 1) \times R) \times (1 \times 2 \times 3 \times \dots (N - R - 1) \times (N - R))\}$$

For example when ***N = 5*** and ***R = 3***

$$1 \times 2 \times 3 \times 4 \times 5 / ((1 \times 2 \times 3) \times (1 \times 2)) = 120 / (6 \times 2) = 10$$

When ***N = 5*** and ***R = 5***

$$1 \times 2 \times 3 \times 4 \times 5 / ((1 \times 2 \times 3 \times 4 \times 5)) = 120 / 120 = 1$$

When ***N = 5*** and ***R = 1***

$$1 \times 2 \times 3 \times 4 \times 5 / ((1 \times 2 \times 3 \times 4) \times 1) = 120 / 24 = 5$$

Input Format

The input is two space-separated numbers ***N*** and ***R***

Constraints

- $1 \leq N \leq 10$ (***N*** is greater than or equal to **1** and less than or equal to **10**)
- $1 \leq R \leq N$ (***R*** is greater than or equal to **1** and less than or equal to ***N***)

Output Format

You should output the number of combinations

Sample Input 0

```
5 3
```

Sample Output 0

```
10
```

Explanation 0

Explained above

Sample Input 1

```
5 5
```

Sample Output 1

```
1
```

Explanation 1

Explained above

Sample Input 2

```
5 1
```

Sample Output 2

```
5
```

Explanation 2

Explained above