Choosing staff to work on open days

At university open days, we need to have a certain number of staff available - let's say we need R ambassadors to show people around and greet visitors. There is a pool of N ambassadors that have signed up to work on open days.

On a particular open day, how many possible combinations of R ambassadors can be drawn from a pool of N?

For instance, if we need 2 ambassadors and there are 3 signed up (N=3, R=2) the answer would be 3.

Input

A single line of text with two integers, N and R. R<N<200

Output

A single integer representing the number of possible combinations of ambassadors.

Example

Input:
10 3

Output:
120