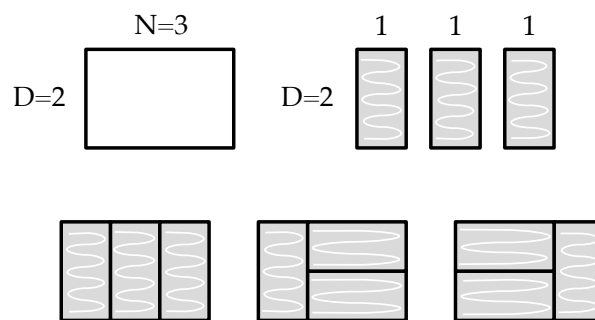




Laying Tiles

The floor of Mouse Stofl's new bathroom has a rectangular shape of size D meters times N meters. Stofl has bought exactly N tiles of size D meters times 1 meter and would now like to cover the floor of his bathroom with those tiles. There seem to be many possible ways to tile the floor. Can you tell him precisely how many?



Input

Read two integers D and N . They are separated by a single space.

Output

Print a single integer, the number of possibilities to tile the floor of Stofl's bathroom.

Limits

We have $1 \leq D \leq 10$ and $1 \leq N \leq 50$.

The test cases consist of 10 test groups.

- In test group 1, worth 10 points, we have $D = 1$.
- In test group 2, worth 20 points, we have $D = 2$.
- In test group 3, worth 70 points, we have $N \leq 30$.

Examples

Input	Output
2 3	3

This is the example in the image above.

Input	Output
3 7	9

This is the example in the image below.

