TCCC '25 Feb P4 - Lion Ladder

Time Limit: 2.0s **Memory Limit:** 64M

The lions of the jungle have long wished to ascend into the treetops, but as everybody knows, lions cannot climb. Their solution is to create a "lion ladder": The lions will stack themselves on top of one another until they reach the canopy. However, they are running into a big problem: Each lion can only support the weight of N $(1 \leq N \leq L)$ other lions. Determine how many lions are required to reach a tree L $(1 \leq L \leq 60)$ lions tall!

Note: The output may be too large to fit inside a 32-bit integer. Use a 64-bit data type, such as `long` in Java or `long long` in C/C++.

Limitations

Subtask 1 (30%)

- $N = 1$
- $1 \leq L \leq 60$.

Subtask 2 (70%)

- $1 \leq N \leq L$
- $1 \leq L \leq 60$.

Input Specification

The only line of input will consist of two integers, N and L.

Output Specification

Output one integer, representing the minimum number of lions required for the ladder.

Sample Input

```
2 5
```

Sample Output

```
8
```

Explanation

If one lion is at the peak (height 5), then there is at least one lion supporting that lion at height 4. One lion at height 3 can support both lions, but two lions are required to support the 3 lions above height 2. This makes 5 lions in total for the bottom layer to support, requiring 3 lions. Adding all the lions together, 8 lions are required for the whole ladder.