

**Problem C**  
**Look and Say**  
Time Limit: 3 Seconds

**Problem Description**

To appease your boredom, you and a friend decide to play a look-and-say game. You and a friend will take turns making sequences by reading aloud the previous sequence and using that reading as the next sequence. For example, 211 is read as "one two, two ones", which becomes 1221 (1 2, 2 1's).

Look-and-say sequences are generated iteratively, using the previous value as input for the next step. For each step, take the previous value, and replace each run of digits (like 111) with the number of digits (3) followed by the digit itself (1). For example:

- 1 becomes 11 (1 copy of digit 1).
- 11 becomes 21 (2 copies of digit 1).
- 21 becomes 1211 (one 2 followed by one 1).
- 1211 becomes 111221 (one 1, one 2, and two 1s).
- 111221 becomes 312211 (three 1s, two 2s, and one 1).

Given an initial "look and say" number and a number of iterations, figure out the resulting number.

**Input File Format**

Input consists of two lines. The first line contains a single integer  $N$  which serves as your initial look-and-say number ( $1 \leq N \leq 2^{31} - 1$ ). The second line contains a single integer  $M$  which specifies the number of iterations to play the look-and-say game ( $1 \leq M \leq 60$ ). Note: numbers will very quickly surpass the realm of integers representable on 32-bit and 64-bit machines.

**Output Format**

Output the resulting **length** of the look-and-say number after  $M$  iterations.

**Sample Input**

1  
5

**Output for the Sample Input**

6