Practice problems for the CS50P Week 2

These are practice problems.

p2digitnum

Task from Latvian 34th Informatics Olympiad warm-up competition.

Any natural number can be expressed in words by naming the digits in its decimal notation in sequence. Furthermore, it's common practice to describe a sequence of consecutive digits as the "count of digits in this group," followed by the name of the digit represented. Always the group of identical digits is taken in the longest possible length.

For example, the number 331444 expressed in words would be "two threes, one one, three fours." This written form in words can again be converted into a numerical form by writing the individual number words with digits without separating symbols: 231134. With this number, the operation can be performed again, and then you get 1213211314.

Write a program that takes two numbers as input: X and N, and outputs the result (number) of performing the described operation on number X, N times.

Example

```
p2digitnum/ $ python3 p2digitnum.py
X=331444
N=2
1213211314
```

Testing and submitting your code

```
check50 okskola/cs50addp/main/p2digitnum
submit50 okskola/cs50addp/main/p2digitnum
```