

Factorial Digits

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given a number N . Print **the number of digits of $N!$** .

Input

Only one line contains a number N ($1 \leq N \leq 10^5$).

Output

Print one line that contains the following respectively:

1. “Number of digits of ” + N + “! is ” + the number of digits.

Example

standard input	standard output
5	Number of digits of 5! is 3

Note

In the first example:

$$5! = 5*4*3*2*1 = 120.$$

And 120 has 3 digits.