

Number of digits in N!

Problem

Submissions

As simple as the title, given a number N, print the number of digits in N!

N! is defined as : $N! = 1 \times 2 \times 3 \times \dots \times (N-1) \times N$

$0! = 0$ and $1! = 1$.

No number ever contains any leading zeros.

Input Format

Input contains only one number, N.

Constraints

$1 \leq N \leq 1000$

Solved: 716
Attempted: 722

Output Format

Output one number that is equal to the number of digits in N!

Sample Input 0

6

Solved: 592
Attempted: 594

Sample Output 0

3

Explanation 0

$6! = 1 \times 2 \times 3 \times 4 \times 5 \times 6 = 720$ which has 3 digits. So the answer is 3.



Contest ends in 1 day 6 hours 4 minutes 4 seconds

Submissions: 594

Max Score: 50

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Current Buffer (saved locally, editable)

Python 3



```
1 import math
2
3 def findDigits(n):
4     if (n < 0):
5         return 0
6     if (n <= 1):
7         return 1
8     digits = 0
9     for i in range(2, n + 1):
10         digits += math.log10(i)
11     return math.floor(digits) + 1
12
13 n=int(input())
14 print(findDigits(n))
15
```

Line: 15 Col: 1

[Upload Code as File](#) ☐ Test against custom input

Run Code

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