Factorials

The factorial of an integer N, written N!, is the product of all the integers from 1 through N inclusive. The factorial quickly becomes very large: 13! is too large to store in a 32-bit integer on most computers, and 70! is too large for most floating-point variables. Your task is to find the rightmost non-zero digit of n!. For example, 5! = 1 * 2 * 3 * 4 * 5 = 120, so the rightmost non-zero digit of 5! is 2. Likewise, 7! = 1 * 2 * 3 * 4 * 5 * 6 * 7 = 5040, so the rightmost non-zero digit of 7! is 4.

PROGRAM NAME: fact4

INPUT FORMAT

A single positive integer N no larger than 4,220.

SAMPLE INPUT (file fact4.in)

7

OUTPUT FORMAT

A single line containing but a single digit: the right most non-zero digit of N! .

SAMPLE OUTPUT (file fact4.out)

4

Submit a solution:

Choose File | No file chosen | Send it in!

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