Bugger Game

Write a program that takes a number and returns its multiplicative persistence, which is the number of times you must multiply the digits in number until you reach a single digit.

Examples bugger(39) → 3 // Because 3 * 9 = 27, 2 * 7 = 14, 1 * 4 = 4 and 4 has only one digit.

bugger(999) → 4 // Because 9 * 9 * 9 = 729, 7 * 2 * 9 = 126, 1 * 2 * 6 = 12, and finally 1 * 2 = 2.

Input Format

Input consists single integer N.

Constraints

1<=N<=10^6

Output Format

Output consists an integer.

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