

Count Primes

Given an integer number n . Get all divisor of n then count number of prime factor in each divisor.

Divisor of n is all numbers that divide n .

Prime factor of N is number of primes in N . For example, 12 is $2^2 * 3^1$ so 12 has 3 prime numbers 2, 2, 3.

Note: 1 is not prime.

Input

input contain one integer N where $1 \leq N \leq 10000$

Output

Print number of prime factors for all divisor of N .

Print endl after the test case

Example

Input:

6

Output:

4

Explanation

Divisors of 6 are 1, 2, 3, 6.

- 1 contains 0 prime.
- 2 contains 1 prime.
- 3 contains 1 prime.
- 6 contains 2 prime.