Jonathan Sumabat 4.5

Time Limit: 2.0s Memory Limit: 64M

Jonathan Sumabat is having trouble with a math problem during his test. Although normally he would be a model student and take his L, this time he has enlisted your help to write a program that lets him cheat. The problem is this:

How many pairs of prime numbers exist between 1 and n both inclusive such that the difference between the two numbers is exactly 1?

Given n, determine the answer to the above problem for Jonathan Sumabat.

Input Specification

The first line is an integer $n \ (1 \le n \le 10^9)$.

Output Specification

Output the answer to the question stated above.