Jibson Problem

Description

This is a work of fiction. Any resemblance to actual events or persons is entirely coincidental.

Jibson is a great baseball player and mathematician. In mathematics, he found many interesting theorems and problems. If there is a chance in the future, you may see these problems.

Among these interesting problems, the most famous one is Jibson Problem.

Do you know Jibson Problem?

This problem was dreamed of when Jibson was asleep, and shows as follows:

How many subset $\{a_1, a_2, ..., a_k\}$ of $\{1, 2, 3, ..., N\}$ satisfy that a_j is not $2a_i$ or $3a_i$ for every $1 \leq i < j \leq k$? Where $a_1 < a_2 < ... < a_k$.

Now, given the N, can you calculate the answer for Jibson Problem?

Input

The first line of the input contains an integer N.

- $1 \leq N \leq 10^6$

Output

Output an integer, which is the answer for Jibson Problem, in a line.

Sample Input

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6
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Sample Output

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23
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