P!=NP

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Count all pairs of integers (n, p) such that $0 \leq p \leq P$, $p \neq n \cdot p$, and $p! = n \cdot p$.

Input

The input consists of a single integer P ($1 \leq P \leq 10^5$) — the upper bound on p.

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Tests in subtasks are numbered from $1 - 10$ with samples skipped. Each test is worth $\frac{100}{10} = 10$ points.

Tests $1 - 5$ will satisfy $P \leq 1000$.

The remaining tests do not satisfy any additional constraints.

Output

Output a single integer — the number of integer values for n and p that satisfy the constraints.

Example

standard input	standard output
4	2

Note

In the sample test, the 2 values of (n, p) that work are $(2, 3)$ and $(6, 4)$.

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Problem Idea: willy108

Problem Preparation: xug

Occurrences: Novice A, Advanced A