A Math Contest P7 - Factors

Time limit: 1.0s **Memory limit:** 256M

Define $f(x)$ as the number of factors of a positive integer x. Given an integer N, determine $\sum_{i=1}^{N} f(i)$.

Input Specification

The only line contains an integer, N $(1 \leq N \leq 10^{12})$.

Output Specification

Output the value of $\sum_{i=1}^{N} f(i)$.

Sample Input

```
5
```

Sample Output

```
10
```

Explanation for Sample

1 has 1 factor: 1.

2 has 2 factors: 1 and 2.

3 has 2 factors: 1 and 3.

4 has 3 factors: 1, 2, and 4.

5 has 2 factors: 1 and 5.

$\sum_{i=1}^{N} f(i) = 1 + 2 + 2 + 3 + 2 = 10$