

Function

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 1024 megabytes

Ranran have a function f , and now he wants to find the value of $f(1) \bmod 998244353$

It is known that:

$$f(x) = \begin{cases} 0 & x > n \\ 1 + \sum_{k=2}^{20210926} f(kx) & \end{cases}$$

Input

The first line of the input contains a single integer n ($1 \leq n \leq 10^9$).

Output

Output a single line contains a single integer, indicating the ansewr.

Examples

standard input	standard output
1	1
2	2
100	949