Count Factorisations

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	256 megabytes

Given a number n. A factorisation of n is a multi-set of integers $\{d_1 \dots d_r\}$ whose elements multiplies to n :

$$n = \prod_{i=1}^{r} d_i$$

Given n, Find the number of its possible factorisations.

Input

A line containing one integer $1 \leq n \leq 10^9$

Output

An integer representing the number of possible factorisations.

Examples

standard input	standard output
1800	137
340510170	21147

Note

Two multi-sets are equal if every element occurs the same number of times in both sets.