Problem F: Divisions

David is a young boy and he loves numbers. Recently he learned how to divide two numbers. David divides the whole day. He is happy if the result of the division is an integer, but he is not very amused if this is not the case. After quite a while he decided to use only a single dividend each day.

The parents of David are very careful and they would like to ensure that David experiences enough happiness. Therefore they decide which number David will use as the dividend for this day.

There is still a problem: The parents are not very good at math and don't know how to calculate the number of positive integral divisors for a given dividend N, which lead to an integral result. Now it's up to you to help David's parents.

Input

The single input line contains the single integer N, where N is chosen as a dividend ($1 \leq N \leq 10^{18}$).

Output

Print the number of positive integral divisors of N that lead to an integral result of the division.

Sample Input 1

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12
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Sample Output 1

```
6
```

Sample Input 2

```
999999999999999989
```

Sample Output 2

```
2
```

Sample Input 3

```
1000000077000000049
```

Sample Output 3

```
4
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