ODD AND EVEN ZEROES

In mathematics, the factorial of a positive integer number *n* is written as *n*! and is defined as follows:

$$n! = 1 \times 2 \times 3 \times 4 \times \cdots \times (n-1) \times n$$

The value of 0! is considered as 1. *n*! grows very rapidly with the increase of *n*. Some values of *n*! are:

0! = 1 5! = 120

1! = 1 10! = 3628800

2! = 2 14! = 87178291200

3! = 6 18! = 6402373705728000

4! = 24 22! = 1124000727777607680000

You can see that for some values of *n*, *n*! has odd number of trailing zeroes (eg 5!, 18!) and for some values of *n*, *n*! has even number of trailing zeroes (eg 0!, 10!, 22!). Given the value of *n*, your job is to find how many of the values 0!, 1!, 2!, 3!, ... , (*n* – 1)!, *n*! has even number of trailing zeroes.

Input

Input file contains at most 1000 lines of input. Each line contains an integer $n (0 \le n \le 10^{18})$.

Input is terminated by a line containing a –1.

Output

For each line of input produce one line of output. This line contains an integer which denotes how many of the numbers 0!, 1!, 2!, 3!, . . ., *n*!, contains even number of trailing zeroes.

Examples

№	stdin	stdout
1	2	3
	3	4
	10	6
	100	61
	1000	525
	2000	1050
	3000	1551

	10000 100000 200000 -1	5050 50250 100126