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

$$n! = 1 \times 2 \times 3 \times 4 \times \cdots \times (n-1) \times n = \prod_{i=1}^{n} i$$

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.

SAMPLE INPUT	SAMPLE OUTPUT
2	3
3	4
10	6
100	61
1000	525
2000	1050
3000	1551
10000	5050
100000	50250
200000	100126
-1	