

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

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

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

$0!$	=	1
$1!$	=	1
$2!$	=	2
$3!$	=	6
$4!$	=	24
$5!$	=	120
$10!$	=	3628800
$14!$	=	87178291200
$18!$	=	6402373705728000
$22!$	=	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  $0!, 1!, 2!, 3!, \dots, (n-1)!, n!$  has even number of trailing zeroes.

## Input

Input file contains at most 1000 lines of input. Each line contains an integer  $n$  ( $0 \leq n \leq 10^{18}$ ). 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  $0!, 1!, 2!, 3!, \dots, n!$ , contains even number of trailing zeroes.

## Sample Input

```
2
3
10
100
1000
2000
3000
10000
100000
200000
-1
```

## Sample Output

```
3
4
6
61
525
1050
1551
5050
50250
100126
```