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:

$$
\begin{array}{ll}
0!=1 & 5!=120 \\
1!=1 & 10!=3628800 \\
2!=2 & 14!=87178291200 \\
3!=6 & 18!=6402373705728000 \\
4!=24 & 22!=1124000727777607680000
\end{array}
$$

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 $0!, 1!, 2!, 3!, \ldots,(n-1)!, n$ ! has even number of trailing zeroes.

## INPUT

Input file contains at most 1000 lines of input. Each line contains an integer $n\left(0 \leq n \leq 10^{18}\right)$. 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 $0!, 1!, 2!, 3!, \ldots, n!$, 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 |  |

