

Maximum Distinct Numbers

Input file: `standard input`
Output file: `standard output`
Time limit: 1 second
Memory limit: 256 megabytes

Given a number N . Print the maximum number of distinct numbers that their summation is less than or equal to N .

Input

Only one line contains a number N ($1 \leq N \leq 10^{18}$).

Output

Print the required answer above.

Examples

standard input	standard output
15	5
8	3

Note

In the first example:

$1+2+3+4+5$ equal 15 which is $\leq N$.

In the second example:

$1+2+3$ equal 6 which is $\leq N$.