

Cool

2023/2024 SEASON – SIXTH ROUND



An integer X is N -cool if it is not bigger than $2 \cdot N$ and the difference between X and the sum of its digits is equal to N . For given N find the biggest N -cool number or print -1 if it doesn't exist.

Input

The first line of the file **cool.in** contains a single integer N .

Output

In the file **cool.out** print the biggest N -cool number or -1.

Constraints

$$1 \leq N \leq 10^{10}$$

Time limit: 0.1 sec.

Memory limit: 256 MB

Sample test

Input (cool.in)	Output (cool.out)
9	18