C. One-Based Arithmetic

time limit per test: 0.5 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Prof. Vasechkin wants to represent positive integer n as a sum of addends, where each addends is an integer number containing only `1`s. For example, he can represent 121 as 121=111+11+–1.
Help him to find the least number of digits `1` in such sum.

Input

The first line of the input contains integer n ($1 \le n < 10^{15}$).

Output

Print expected minimal number of digits `1`.

Examples

input
121

output
6