F. 000001

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Input

The input contains a single integer a ($1 \leq a \leq 64$).

Output

Output a single integer.

Examples

input
2

output
1

input
4

output
2

input
27

output
5

input
42

output
6