A. Mysterious strings

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Input

The input contains a single integer a ($1 \leq a \leq 40$).

Output

Output a single string.

Examples

input
2

output
Adams

input
8

output
Van Buren

input
29

output
Harding