

2661 - Finding Rest

Description

Given a natural number N ($0 \leq N \leq 2^{100007}$), could you tell the value R of the remainder of the euclidean division of 7^N by 9.

Input specification

The entry consists of an unknown number of lines with a number N in each of them.

Output specification

For each number on the input, you should print only an integer R per line.

Sample input

3
2

Sample output

1
4

Hint(s)

Source	Yaniel Alfredo Velázquez Bruceta
Added by	Slash
Addition date	2013-12-07
Time limit (ms)	3000
Test limit (ms)	1000
Memory limit (kb)	256000
Output limit (mb)	64
Size limit (bytes)	15000

Enabled languages

Bash C C# C++ Java Pascal Perl PHP
Python Ruby Text