

ELITE NUMBERS

Let's call an integer number *elite* if it is divisible by every digit of its decimal representation.

Given an integer x , your program must find the smallest elite number greater than or equal to x .

Input

Input file contains the integer x ($1 \leq x \leq 10^{10}$).

Output

Output file must contain a single integer — the smallest elite number.

Examples

Nº	stdin	stdout
1	10	11
2	7777777777	7777777777