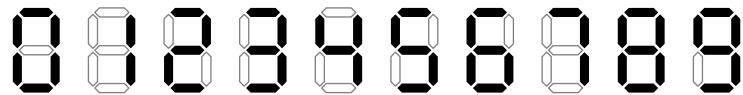


Problem G. Elevator Ride

Time limit: 1 second
Memory limit: 512 megabytes

Every time Katya enters the elevator, she sees the reflection of the floor number in the mirror.
The floor number is displayed on a panel, which shows the digits as shown in the picture.



Because the floor number is visible in the mirror, its reflection is reversed with respect to the vertical axis: the order of the digits is reversed and the digits appear as their reflections. However, if a digit x after reflection completely coincides with another digit y , the brain perceives it as y . But if it does not match any other digit, despite being reflected, the brain perceives x as x .

What number will Katya see when she enters the elevator, if it is known that she lives on the k -th floor.

Input

Given an integer k ($1 \leq k \leq 10^{18}$) — the floor where Katya lives.

Output

Output a single number that Katya will see in the mirror, without leading zeros.

Examples

standard input	standard output
13	31
250	25
1234567890	987624351