

# Problem A

## Palindrome Numbers

Input: Standard Input  
Output: Standard Output

A palindrome is a word, number, or phrase that reads the same forwards as backwards. For example, the name "anna" is a palindrome. Numbers can also be palindromes (e.g. **151** or **753357**). Additionally numbers can of course be ordered in size. The first few palindrome numbers are: **1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 22, 33, ...**

The number **10** is not a palindrome (even though you could write it as **010**) but a zero as leading digit is not allowed.

### Input

The input consists of a series of lines with each line containing one integer value **i** ( $1 \leq i \leq 2 \cdot 10^9$ ). This integer value **i** indicates the index of the palindrome number that is to be written to the output, where index **1** stands for the first palindrome number (**1**), index **2** stands for the second palindrome number (**2**) and so on. The input is terminated by a line containing **0**.

### Output

For each line of input (except the last one) exactly one line of output containing a single (decimal) integer value is to be produced. For each input value **i** the **i**-th palindrome number is to be written to the output.

### Sample Input

**1**  
**12**  
**24**  
**0**

### Output for Sample Input

**1**  
**33**  
**151**