



2889 - Palindrome Numbers

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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
```

Sample Output

```
1
33
151
```

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