

Coding Arena

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Problem : Numbers with non-decreasing digits

Some numbers such as 7, 234, 12378 have the digits that are non-decreasing when we read them from left to right. In this problem, we want to find the largest such number less than or equal to a given number N.

Input Format:

Integer N

Output Format:

Largest integer $M \leq N$ that has its digits non-decreasing. The output should not contain leading zeros.

Constraints:

$N \leq 10^{18}$

Example 1

Input
89

Output
89

Explanation
89 itself has non-decreasing digits.

Example 2

Input
549

Output
499

Explanation
From 500 to 549, the integers have 5 as the leading digit and the second digit must be less than or equal to 4. But then, such a number cannot have its digits non decreasing.

Note:

Please do not use package and namespace in your code. For object oriented languages your code should be written in one class.

Note:

Participants submitting solutions in C language should not use functions from `<conio.h>` / `<process.h>` as these files do not exist in gcc

Note:

For C and C++, return type of `main()` function should be `int`.

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