

## A. Beautiful Year

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

It seems like the year of 2013 came only yesterday. Do you know a curious fact? The year of 2013 is the first year after the old 1987 with only distinct digits.

Now you are suggested to solve the following problem: given a year number, find the minimum year number which is strictly larger than the given one and has only distinct digits.

### Input

The single line contains integer  $y$  ( $1000 \leq y \leq 9000$ ) — the year number.

### Output

Print a single integer — the minimum year number that is strictly larger than  $y$  and all its digits are distinct. It is guaranteed that the answer exists.

### Examples

<b>input</b>	<a href="#">Copy</a>
1987	
<b>output</b>	<a href="#">Copy</a>
2013	

  

<b>input</b>	<a href="#">Copy</a>
2013	
<b>output</b>	<a href="#">Copy</a>
2014	

### → Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

### Codeforces Round #166 (Div. 2)

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### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest](#)

### → Clone Contest to Mashup

You can clone this contest to a mashup.

[Clone Contest](#)

### → Submit?

 Language: Java 1.8.0\_241

 Choose file: [Choose File](#) No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

[Submit](#)

→ Last submissions		
Submission	Time	Verdict
<a href="#">132642569</a>	Oct/21/2021 20:44	Accepted

→ Problem tags	
brute force	*800
No tag edit access	

→ Contest materials	
• Announcement	×
• Tutorial #1 (ru)	×
• Tutorial #2 (en)	×

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Server time: Oct/21/2021 13:51:44<sup>UTC-4</sup> (h3).  
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