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 ≤ *y* ≤ 9000) — the year number.

**Output**

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

**Sample test(s)**

**input**

1987

**output**

2013

**input**

2013

**output**

2014

<http://codeforces.com/problemset/problem/271/A>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static bool hayIguales(int n)

{

string ns = n.ToString();

for (int i = 0; i < ns.Length - 1; i++)

{

for (int j = i + 1; j < ns.Length; j++)

{

if (ns[i] == ns[j])

{

return true;

}

}

}

return false;

}

static void Main(string[] args)

{

int y = int.Parse(Console.ReadLine());

int answer = 0;

//bool todosDistintos = false;

for (int i = y + 1; ; i++)

{

if (!hayIguales(i))

{

answer = i;

break;

}

}

Console.WriteLine(answer);

Console.ReadLine();

}

}

}

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using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static void Main(string[] args)

{

int y = int.Parse(Console.ReadLine());

int answer = y+1;

for (int j = y+1; ; j++)

{

bool distintos = true;

int copia = j;

var digitos = new HashSet<int>();

while (copia > 0)

{

if (!digitos.Contains(copia % 10))

{

digitos.Add(copia % 10);

}

else

{

distintos = false;

break;

}

copia /= 10;

}

if (distintos)

{

answer = j;

break;

}

}

Console.WriteLine(answer);

Console.ReadLine();

}

}

}