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| **Prime Palindromes**    Problem code: PRPALIN | * [SUBMIT](https://www.codechef.com/submit/PRPALIN) * [MY SUBMISSIONS](https://www.codechef.com/status/PRPALIN,nacho0monllor) * [ALL SUBMISSIONS](https://www.codechef.com/status/PRPALIN) |

**All submissions for this problem are available.**

An integer is said to be a palindrome if it is equal to its reverse. For example, 79197 and 324423 are palindromes. In this task you will be given an integer N, 1 ≤ N ≤ 1000000. You must find the smallest integer M ≥ N such that M is a prime number and M is a palindrome.

For example, if N is 31 then the answer is 101.

**Input**

A single integer N, (1 ≤ N ≤ 1000000), on a single line.

**Output**

Your output must consist of a single integer, the smallest prime palindrome greater than or equal to N.

**Example**

**Input:**

31

**Output:**

101

<https://www.codechef.com/problems/PRPALIN>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static bool esPrimo(int n)

{

if (n < 2) return false;

if (n == 2) return true;

if (n % 2 == 0) return false;

int sqr = (int)Math.Sqrt(n);

for (int i = 3; i <= sqr; i += 2)

{

if (n % i == 0) return false;

}

return true;

}

static void Main(string[] args)

{

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

int ans = n;

for (int i = n; ; i++)

{

char[] rev = i.ToString().ToCharArray();

Array.Reverse(rev);

if (esPrimo(i) && i.ToString() ==

new string(rev))

{

ans = i;

break;

}

}

Console.WriteLine(ans);

Console.ReadLine();

}

}

}