

Problem 866: Prime Palindrome

Problem Information

Difficulty: Medium

Acceptance Rate: 27.77%

Paid Only: No

Tags: Math, Number Theory

Problem Description

Given an integer n , return the smallest prime palindrome greater than or equal to n .

An integer is **prime** if it has exactly two divisors: 1 and itself. Note that 1 is not a prime number.

* For example, 2, 3, 5, 7, 11, and 13 are all primes.

An integer is a **palindrome** if it reads the same from left to right as it does from right to left.

* For example, 101 and 12321 are palindromes.

The test cases are generated so that the answer always exists and is in the range $[2, 2 \times 10^8]$.

Example 1:

Input: $n = 6$ **Output:** 7

Example 2:

Input: $n = 8$ **Output:** 11

Example 3:

Input: $n = 13$ **Output:** 101

****Constraints:****

***`1 <= n <= 108`**

Code Snippets

C++:

```
class Solution {  
public:  
    int primePalindrome(int n) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int primePalindrome(int n) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def primePalindrome(self, n: int) -> int:
```