

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 * 108]`.

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:
```