

Problem 2443: Sum of Number and Its Reverse

Problem Information

Difficulty: Medium

Acceptance Rate: 48.94%

Paid Only: No

Tags: Math, Enumeration

Problem Description

Given a **non-negative** integer `num`, return `true` if `num` can be expressed as the sum of any **non-negative** integer and its reverse, or `false` otherwise.

Example 1:

Input: `num = 443` **Output:** `true` **Explanation:** `172 + 271 = 443` so we return `true`.

Example 2:

Input: `num = 63` **Output:** `false` **Explanation:** `63` cannot be expressed as the sum of a non-negative integer and its reverse so we return `false`.

Example 3:

Input: `num = 181` **Output:** `true` **Explanation:** `140 + 041 = 181` so we return `true`. Note that when a number is reversed, there may be leading zeros.

Constraints:

`0 ≤ num ≤ 105`

Code Snippets

C++:

```
class Solution {  
public:  
    bool sumOfNumberAndReverse(int num) {  
  
    }  
};
```

Java:

```
class Solution {  
    public boolean sumOfNumberAndReverse(int num) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def sumOfNumberAndReverse(self, num: int) -> bool:
```