

# Problem 1842: Next Palindrome Using Same Digits

## Problem Information

**Difficulty:** Hard

**Acceptance Rate:** 53.89%

**Paid Only:** Yes

**Tags:** Two Pointers, String

## Problem Description

You are given a numeric string `num`, representing a very large **palindrome**.

Return `the smallest palindrome larger than num` that can be created by rearranging its digits. If no such palindrome exists, return an empty string `""`.

A **palindrome** is a number that reads the same backward as forward.

**Example 1:**

**Input:** `num = "1221"` **Output:** `"2112"` **Explanation:** The next palindrome larger than "1221" is "2112".

**Example 2:**

**Input:** `num = "32123"` **Output:** `""` **Explanation:** No palindromes larger than "32123" can be made by rearranging the digits.

**Example 3:**

**Input:** `num = "45544554"` **Output:** `"54455445"` **Explanation:** The next palindrome larger than "45544554" is "54455445".

**Constraints:**

\*`1 <= num.length <= 105` \*`num` is a **palindrome**\*.

## Code Snippets

### C++:

```
class Solution {  
public:  
    string nextPalindrome(string num) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public String nextPalindrome(String num) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def nextPalindrome(self, num: str) -> str:
```