

Problem 2384: Largest Palindromic Number

Problem Information

Difficulty: Medium

Acceptance Rate: 36.83%

Paid Only: No

Tags: Hash Table, String, Greedy, Counting

Problem Description

You are given a string `num` consisting of digits only.

Return _the**largest palindromic** integer (in the form of a string) that can be formed using digits taken from _`num`_. It should not contain **leading zeroes**.

Notes:

* You do **not** need to use all the digits of `num`, but you must use **at least** one digit.
* The digits can be reordered.

Example 1:

Input: num = "444947137" **Output:** "7449447" **Explanation:** Use the digits "4449477" from "_**44494**_ _**7**_ 13 _**7**_" to form the palindromic integer "7449447". It can be shown that "7449447" is the largest palindromic integer that can be formed.

Example 2:

Input: num = "00009" **Output:** "9" **Explanation:** It can be shown that "9" is the largest palindromic integer that can be formed. Note that the integer returned should not contain leading zeroes.

Constraints:

* `1 <= num.length <= 105` * `num` consists of digits.

Code Snippets

C++:

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

Java:

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

Python3:

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