

Problem 1903: Largest Odd Number in String

Problem Information

Difficulty: Easy

Acceptance Rate: 66.45%

Paid Only: No

Tags: Math, String, Greedy

Problem Description

You are given a string `num`, representing a large integer. Return _the**largest-valued odd** integer (as a string) that is a **non-empty substring** of `num` _, or an empty string_ `""` _if no odd integer exists_.

A **substring** is a contiguous sequence of characters within a string.

Example 1:

Input: num = "52" **Output:** "5" **Explanation:** The only non-empty substrings are "5", "2", and "52". "5" is the only odd number.

Example 2:

Input: num = "4206" **Output:** "" **Explanation:** There are no odd numbers in "4206".

Example 3:

Input: num = "35427" **Output:** "35427" **Explanation:** "35427" is already an odd number.

Constraints:

* `1 <= num.length <= 105` * `num` only consists of digits and does not contain any leading zeros.

Code Snippets

C++:

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

Java:

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

Python3:

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