

# Problem 2264: Largest 3-Same-Digit Number in String

## Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

You are given a string

num

representing a large integer. An integer is

good

if it meets the following conditions:

It is a

substring

of

num

with length

3

.

It consists of only one unique digit.

Return

the

maximum good

integer as a

string

or an empty string

""

if no such integer exists

.

Note:

A

substring

is a contiguous sequence of characters within a string.

There may be

leading zeroes

in

num

or a good integer.

Example 1:

Input:

num = "6

777

133339"

Output:

"777"

Explanation:

There are two distinct good integers: "777" and "333". "777" is the largest, so we return "777".

Example 2:

Input:

num = "23

000

19"

Output:

"000"

Explanation:

"000" is the only good integer.

Example 3:

Input:

num = "42352338"

Output:

""

Explanation:

No substring of length 3 consists of only one unique digit. Therefore, there are no good integers.

Constraints:

$3 \leq \text{num.length} \leq 1000$

num

only consists of digits.

## Code Snippets

**C++:**

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

**Java:**

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

**Python3:**

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

### Python:

```
class Solution(object):
    def largestGoodInteger(self, num):
        """
        :type num: str
        :rtype: str
        """
```

### JavaScript:

```
/**
 * @param {string} num
 * @return {string}
 */
var largestGoodInteger = function(num) {

};
```

### TypeScript:

```
function largestGoodInteger(num: string): string {

};
```

### C#:

```
public class Solution {
    public string LargestGoodInteger(string num) {

    }
}
```

### C:

```
char* largestGoodInteger(char* num) {

}
```

### Go:

```
func largestGoodInteger(num string) string {  
  
}
```

### Kotlin:

```
class Solution {  
    fun largestGoodInteger(num: String): String {  
  
    }  
}
```

### Swift:

```
class Solution {  
    func largestGoodInteger(_ num: String) -> String {  
  
    }  
}
```

### Rust:

```
impl Solution {  
    pub fn largest_good_integer(num: String) -> String {  
  
    }  
}
```

### Ruby:

```
# @param {String} num  
# @return {String}  
def largest_good_integer(num)  
  
end
```

### PHP:

```
class Solution {  
  
    /**  
     * @param String $num  
     * @return String  
     */  
}
```

```

*/
function largestGoodInteger($num) {

}

}

```

### Dart:

```

class Solution {
  String largestGoodInteger(String num) {

  }
}

```

### Scala:

```

object Solution {
  def largestGoodInteger(num: String): String = {

  }
}

```

### Elixir:

```

defmodule Solution do
  @spec largest_good_integer(num :: String.t) :: String.t
  def largest_good_integer(num) do

  end
end

```

### Erlang:

```

-spec largest_good_integer(Num :: unicode:unicode_binary()) ->
  unicode:unicode_binary().
largest_good_integer(Num) ->
.

```

### Racket:

```

(define/contract (largest-good-integer num)
  (-> string? string?))

```

```
)
```

## Solutions

### C++ Solution:

```
/*
 * Problem: Largest 3-Same-Digit Number in String
 * Difficulty: Easy
 * Tags: string, tree
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(h) for recursion stack where h is height
 */

class Solution {
public:
    string largestGoodInteger(string num) {

    }
};
```

### Java Solution:

```
/**
 * Problem: Largest 3-Same-Digit Number in String
 * Difficulty: Easy
 * Tags: string, tree
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(h) for recursion stack where h is height
 */

class Solution {
    public String largestGoodInteger(String num) {

    }
}
```



### Python3 Solution:

```
"""
Problem: Largest 3-Same-Digit Number in String
Difficulty: Easy
Tags: string, tree

Approach: String manipulation with hash map or two pointers
Time Complexity: O(n) or O(n log n)
Space Complexity: O(h) for recursion stack where h is height
"""

class Solution:
    def largestGoodInteger(self, num: str) -> str:
        # TODO: Implement optimized solution
        pass
```

### Python Solution:

```
class Solution(object):
    def largestGoodInteger(self, num):
        """
        :type num: str
        :rtype: str
        """
```

### JavaScript Solution:

```
/**
 * Problem: Largest 3-Same-Digit Number in String
 * Difficulty: Easy
 * Tags: string, tree
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(h) for recursion stack where h is height
 */

/**
 * @param {string} num
 * @return {string}
 */
```

```
var largestGoodInteger = function(num) {  
  
};
```

### TypeScript Solution:

```
/**  
 * Problem: Largest 3-Same-Digit Number in String  
 * Difficulty: Easy  
 * Tags: string, tree  
 *  
 * Approach: String manipulation with hash map or two pointers  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(h) for recursion stack where h is height  
 */  
  
function largestGoodInteger(num: string): string {  
  
};
```

### C# Solution:

```
/*  
 * Problem: Largest 3-Same-Digit Number in String  
 * Difficulty: Easy  
 * Tags: string, tree  
 *  
 * Approach: String manipulation with hash map or two pointers  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(h) for recursion stack where h is height  
 */  
  
public class Solution {  
    public string LargestGoodInteger(string num) {  
  
    }  
}
```

### C Solution:

```

/*
 * Problem: Largest 3-Same-Digit Number in String
 * Difficulty: Easy
 * Tags: string, tree
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(h) for recursion stack where h is height
 */

char* largestGoodInteger(char* num) {

}

```

### Go Solution:

```

// Problem: Largest 3-Same-Digit Number in String
// Difficulty: Easy
// Tags: string, tree
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(h) for recursion stack where h is height

func largestGoodInteger(num string) string {

}

```

### Kotlin Solution:

```

class Solution {
    fun largestGoodInteger(num: String): String {

    }
}

```

### Swift Solution:

```

class Solution {
    func largestGoodInteger(_ num: String) -> String {

    }
}

```

```
}
```

### Rust Solution:

```
// Problem: Largest 3-Same-Digit Number in String
// Difficulty: Easy
// Tags: string, tree
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(h) for recursion stack where h is height

impl Solution {
    pub fn largest_good_integer(num: String) -> String {

    }
}
```

### Ruby Solution:

```
# @param {String} num
# @return {String}
def largest_good_integer(num)

end
```

### PHP Solution:

```
class Solution {

    /**
     * @param String $num
     * @return String
     */
    function largestGoodInteger($num) {

    }
}
```

### Dart Solution:

```
class Solution {  
  String largestGoodInteger(String num) {  
  
  }  
}
```

### Scala Solution:

```
object Solution {  
  def largestGoodInteger(num: String): String = {  
  
  }  
}
```

### Elixir Solution:

```
defmodule Solution do  
  @spec largest_good_integer(num :: String.t) :: String.t  
  def largest_good_integer(num) do  
  
  end  
end
```

### Erlang Solution:

```
-spec largest_good_integer(Num :: unicode:unicode_binary()) ->  
  unicode:unicode_binary().  
largest_good_integer(Num) ->  
  .
```

### Racket Solution:

```
(define/contract (largest-good-integer num)  
  (-> string? string?)  
  )
```