Problem 171: Excel Sheet Column Number

Problem Information

Difficulty: Easy
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Given a string

columnTitle

that represents the column title as appears in an Excel sheet, return

its corresponding column number

.

For example:

A -> 1 B -> 2 C -> 3 ... Z -> 26 AA -> 27 AB -> 28 ...

Example 1:

Input:

columnTitle = "A"

Output:

1

Example 2:

Input:

columnTitle = "AB"

Output:

28

Example 3:

Input:

columnTitle = "ZY"

Output:

701

Constraints:

1 <= columnTitle.length <= 7

columnTitle

consists only of uppercase English letters.

columnTitle

is in the range

["A", "FXSHRXW"]

.

Code Snippets

C++:

```
class Solution {
public:
int titleToNumber(string columnTitle) {

}
};
```

Java:

```
class Solution {
public int titleToNumber(String columnTitle) {

}
}
```

Python3:

```
class Solution:
def titleToNumber(self, columnTitle: str) -> int:
```

Python:

```
class Solution(object):
def titleToNumber(self, columnTitle):
"""
:type columnTitle: str
:rtype: int
"""
```

JavaScript:

```
/**
* @param {string} columnTitle
* @return {number}
*/
var titleToNumber = function(columnTitle) {

};
```

TypeScript:

```
function titleToNumber(columnTitle: string): number {
```

```
};
```

C#:

```
public class Solution {
public int TitleToNumber(string columnTitle) {

}
}
```

C:

```
int titleToNumber(char* columnTitle) {

}
```

Go:

```
func titleToNumber(columnTitle string) int {

}
```

Kotlin:

```
class Solution {
fun titleToNumber(columnTitle: String): Int {

}
}
```

Swift:

```
class Solution {
func titleToNumber(_ columnTitle: String) -> Int {

}
}
```

Rust:

```
impl Solution {
pub fn title_to_number(column_title: String) -> i32 {
```

```
}
}
```

Ruby:

```
# @param {String} column_title
# @return {Integer}
def title_to_number(column_title)

end
```

PHP:

```
class Solution {

/**
* @param String $columnTitle
* @return Integer
*/
function titleToNumber($columnTitle) {

}
}
```

Dart:

```
class Solution {
int titleToNumber(String columnTitle) {

}
}
```

Scala:

```
object Solution {
def titleToNumber(columnTitle: String): Int = {

}
}
```

Elixir:

```
defmodule Solution do
@spec title_to_number(column_title :: String.t) :: integer
def title_to_number(column_title) do

end
end
```

Erlang:

```
-spec title_to_number(ColumnTitle :: unicode:unicode_binary()) -> integer().
title_to_number(ColumnTitle) ->
.
```

Racket:

```
(define/contract (title-to-number columnTitle)
(-> string? exact-integer?)
)
```

Solutions

C++ Solution:

```
/*
* Problem: Excel Sheet Column Number
* Difficulty: Easy
* Tags: string, math
*
* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/

class Solution {
public:
int titleToNumber(string columnTitle) {

}
};
```

Java Solution:

```
/**
* Problem: Excel Sheet Column Number
* Difficulty: Easy
* Tags: string, math
*
* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/

class Solution {
public int titleToNumber(String columnTitle) {

}
}
```

Python3 Solution:

```
"""
Problem: Excel Sheet Column Number
Difficulty: Easy
Tags: string, math

Approach: String manipulation with hash map or two pointers
Time Complexity: O(n) or O(n log n)
Space Complexity: O(1) to O(n) depending on approach
"""

class Solution:
def titleToNumber(self, columnTitle: str) -> int:
# TODO: Implement optimized solution
pass
```

Python Solution:

```
class Solution(object):
def titleToNumber(self, columnTitle):
"""
:type columnTitle: str
:rtype: int
"""
```

JavaScript Solution:

```
/**
* Problem: Excel Sheet Column Number
* Difficulty: Easy
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* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
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/**
* @param {string} columnTitle
* @return {number}
*/
var titleToNumber = function(columnTitle) {

};
```

TypeScript Solution:

```
/**
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* Difficulty: Easy
* Tags: string, math
*
* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
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*/

function titleToNumber(columnTitle: string): number {

};
```

C# Solution:

```
/*
* Problem: Excel Sheet Column Number
* Difficulty: Easy
* Tags: string, math
*
```

```
* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
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*/

public class Solution {
public int TitleToNumber(string columnTitle) {

}
}
```

C Solution:

```
/*
* Problem: Excel Sheet Column Number
* Difficulty: Easy
* Tags: string, math
*
* Approach: String manipulation with hash map or two pointers
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/

int titleToNumber(char* columnTitle) {

}
```

Go Solution:

```
// Problem: Excel Sheet Column Number
// Difficulty: Easy
// Tags: string, math
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

func titleToNumber(columnTitle string) int {

}
```

Kotlin Solution:

```
class Solution {
fun titleToNumber(columnTitle: String): Int {

}
}
```

Swift Solution:

```
class Solution {
func titleToNumber(_ columnTitle: String) -> Int {

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}
```

Rust Solution:

```
// Problem: Excel Sheet Column Number
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impl Solution {
pub fn title_to_number(column_title: String) -> i32 {

}
}
```

Ruby Solution:

```
# @param {String} column_title
# @return {Integer}
def title_to_number(column_title)

end
```

PHP Solution:

```
class Solution {

/**
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