

Problem 168: Excel Sheet Column Title

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given an integer

columnNumber

, return

its corresponding column title as it appears in an Excel sheet

For example:

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

Example 1:

Input:

columnNumber = 1

Output:

"A"

Example 2:

Input:

columnNumber = 28

Output:

"AB"

Example 3:

Input:

columnNumber = 701

Output:

"ZY"

Constraints:

$1 \leq \text{columnNumber} \leq 2$

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Code Snippets

C++:

```
class Solution {
public:
    string convertToTitle(int columnNumber) {
        }
};
```

Java:

```
class Solution {  
    public String convertToTitle(int columnNumber) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def convertToTitle(self, columnNumber: int) -> str:
```

Python:

```
class Solution(object):  
    def convertToTitle(self, columnNumber):  
        """  
        :type columnNumber: int  
        :rtype: str  
        """
```

JavaScript:

```
/**  
 * @param {number} columnNumber  
 * @return {string}  
 */  
var convertToTitle = function(columnNumber) {  
  
};
```

TypeScript:

```
function convertToTitle(columnNumber: number): string {  
  
};
```

C#:

```
public class Solution {  
    public string ConvertToTitle(int columnNumber) {  
  
    }  
}
```

C:

```
char* convertToTitle(int columnNumber) {  
}  
}
```

Go:

```
func convertToTitle(columnNumber int) string {  
}  
}
```

Kotlin:

```
class Solution {  
    fun convertToTitle(columnNumber: Int): String {  
        }  
        }  
}
```

Swift:

```
class Solution {  
    func convertToTitle(_ columnNumber: Int) -> String {  
        }  
        }  
}
```

Rust:

```
impl Solution {  
    pub fn convert_to_title(column_number: i32) -> String {  
        }  
        }  
}
```

Ruby:

```
# @param {Integer} column_number  
# @return {String}  
def convert_to_title(column_number)  
  
end
```

PHP:

```
class Solution {  
  
    /**  
     * @param Integer $columnNumber  
     * @return String  
     */  
    function convertToTitle($columnNumber) {  
  
    }  
}
```

Dart:

```
class Solution {  
    String convertToTitle(int columnNumber) {  
  
    }  
}
```

Scala:

```
object Solution {  
    def convertToTitle(columnNumber: Int): String = {  
  
    }  
}
```

Elixir:

```
defmodule Solution do  
  @spec convert_to_title(column_number :: integer) :: String.t  
  def convert_to_title(column_number) do  
  
  end  
end
```

Erlang:

```
-spec convert_to_title(ColumnName :: integer()) ->  
unicode:unicode_binary().  
convert_to_title(ColumnName) ->
```

.

Racket:

```
(define/contract (convert-to-title columnNumber)
  (-> exact-integer? string?))
```

Solutions

C++ Solution:

```
/*
 * Problem: Excel Sheet Column Title
 * 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:
    string convertToTitle(int columnNumber) {

    }
};
```

Java Solution:

```
/**
 * Problem: Excel Sheet Column Title
 * 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 String convertToTitle(int columnNumber) {  
  
    }  
}
```

Python3 Solution:

```
"""  
  
Problem: Excel Sheet Column Title  
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 convertToTitle(self, columnNumber: int) -> str:  
        # TODO: Implement optimized solution  
        pass
```

Python Solution:

```
class Solution(object):  
    def convertToTitle(self, columnNumber):  
        """  
        :type columnNumber: int  
        :rtype: str  
        """
```

JavaScript Solution:

```
/**  
 * Problem: Excel Sheet Column Title  
 * 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
 */

/** 
 * @param {number} columnNumber
 * @return {string}
 */
var convertToTitle = function(columnNumber) {

};

```

TypeScript Solution:

```

/** 
 * Problem: Excel Sheet Column Title
 * 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
 */

function convertToTitle(columnNumber: number): string {
}

```

C# Solution:

```

/*
 * Problem: Excel Sheet Column Title
 * 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
 */

public class Solution {

```

```
public string ConvertToTitle(int columnNumber) {  
    }  
}
```

C Solution:

```
/*  
 * Problem: Excel Sheet Column Title  
 * 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  
 */  
  
char* convertToTitle(int columnNumber) {  
}
```

Go Solution:

```
// Problem: Excel Sheet Column Title  
// 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 convertToTitle(columnNumber int) string {  
}
```

Kotlin Solution:

```
class Solution {  
    fun convertToTitle(columnNumber: Int): String {  
    }
```

}

Swift Solution:

```
class Solution {
    func convertToTitle(_ columnNumber: Int) -> String {
        ...
    }
}
```

Rust Solution:

```
// Problem: Excel Sheet Column Title
// 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

impl Solution {
    pub fn convert_to_title(column_number: i32) -> String {
        let mut result = String::new();
        while column_number > 0 {
            column_number -= 1;
            let remainder = column_number % 26;
            if remainder == 0 {
                result.push('Z');
            } else {
                result.push((remainder + 64) as char);
            }
            column_number /= 26;
        }
        result.reverse();
        result
    }
}
```

Ruby Solution:

```
# @param {Integer} column_number
# @return {String}
def convert_to_title(column_number)

end
```

PHP Solution:

```
class Solution {  
  
    /**  
     * @param Integer $columnNumber  
     * @return String  
    */  
    public function convert($s, $n)  
    {  
        if ($n == 1) {  
            return $s;  
        }  
  
        $row = 0;  
        $rows = $n;  
        $len = strlen($s);  
        $ans = str_repeat(' ', $len);  
  
        for ($i = 0; $i < $len; $i++) {  
            if ($row == 0 || $row == $rows - 1) {  
                $ans[$i] = $s[$i];  
            } else {  
                $ans[$i] = $s[$i];  
                $ans[$i + $rows - $row - 2] = $s[$i];  
            }  
            $row++;  
            if ($row == $rows) {  
                $row = 0;  
            }  
        }  
        return $ans;  
    }  
}
```

```
*/  
function convertToTitle($columnNumber) {  
  
}  
}  
}
```

Dart Solution:

```
class Solution {  
String convertToTitle(int columnNumber) {  
  
}  
}  
}
```

Scala Solution:

```
object Solution {  
def convertToTitle(columnNumber: Int): String = {  
  
}  
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```

Elixir Solution:

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defmodule Solution do  
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end  
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convert_to_title(ColumnName) ->  
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