

# 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:

$1 \leq \text{columnNumber} \leq 26$

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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(ColumnNumber :: integer()) ->
    unicode:unicode_binary().
convert_to_title(ColumnNumber) ->
```

```
.
```

### 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 {  
  
    }  
}
```

### Ruby Solution:

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

### PHP Solution:

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

```

*/
function convertToTitle($columnNumber) {

}

}

```

### Dart Solution:

```

class Solution {
  String convertToTitle(int columnNumber) {

  }
}

```

### Scala Solution:

```

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

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  end
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