

# Problem 3210: Find the Encrypted String

## Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

You are given a string

$s$

and an integer

$k$

. Encrypt the string using the following algorithm:

For each character

$c$

in

$s$

, replace

$c$

with the

$k$

th

character after

c

in the string (in a cyclic manner).

Return the

encrypted string

.

Example 1:

Input:

s = "dart", k = 3

Output:

"tdar"

Explanation:

For

i = 0

, the 3

rd

character after

'd'

is

't'

.

For

i = 1

, the 3

rd

character after

'a'

is

'd'

.

For

i = 2

, the 3

rd

character after

'r'

is

'a'

.

For

$i = 3$

, the 3

rd

character after

't'

is

'r'

.

Example 2:

Input:

$s = \text{"aaa"}, k = 1$

Output:

`"aaa"`

Explanation:

As all the characters are the same, the encrypted string will also be the same.

Constraints:

$1 \leq s.length \leq 100$

$1 \leq k \leq 10$

4

s

consists only of lowercase English letters.

## Code Snippets

### C++:

```
class Solution {  
public:  
    string getEncryptedString(string s, int k) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public String getEncryptedString(String s, int k) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def getEncryptedString(self, s: str, k: int) -> str:
```

### Python:

```
class Solution(object):  
    def getEncryptedString(self, s, k):  
        """  
        :type s: str  
        :type k: int  
        :rtype: str  
        """
```

## JavaScript:

```
/**
 * @param {string} s
 * @param {number} k
 * @return {string}
 */
var getEncryptedString = function(s, k) {

};
```

## TypeScript:

```
function getEncryptedString(s: string, k: number): string {

};
```

## C#:

```
public class Solution {
    public string GetEncryptedString(string s, int k) {

    }
}
```

## C:

```
char* getEncryptedString(char* s, int k) {

}
```

## Go:

```
func getEncryptedString(s string, k int) string {

}
```

## Kotlin:

```
class Solution {
    fun getEncryptedString(s: String, k: Int): String {

    }
}
```

```
}
```

### Swift:

```
class Solution {  
    func getEncryptedString(_ s: String, _ k: Int) -> String {  
  
    }  
}
```

### Rust:

```
impl Solution {  
    pub fn get_encrypted_string(s: String, k: i32) -> String {  
  
    }  
}
```

### Ruby:

```
# @param {String} s  
# @param {Integer} k  
# @return {String}  
def get_encrypted_string(s, k)  
  
end
```

### PHP:

```
class Solution {  
  
    /**  
     * @param String $s  
     * @param Integer $k  
     * @return String  
     */  
    function getEncryptedString($s, $k) {  
  
    }  
}
```

### Dart:

```

class Solution {
    String getEncryptedString(String s, int k) {

    }
}

```

### Scala:

```

object Solution {
    def getEncryptedString(s: String, k: Int): String = {

    }
}

```

### Elixir:

```

defmodule Solution do
  @spec get_encrypted_string(s :: String.t, k :: integer) :: String.t
  def get_encrypted_string(s, k) do

  end
end

```

### Erlang:

```

-spec get_encrypted_string(S :: unicode:unicode_binary(), K :: integer()) ->
    unicode:unicode_binary().
get_encrypted_string(S, K) ->
    .

```

### Racket:

```

(define/contract (get-encrypted-string s k)
  (-> string? exact-integer? string?)
  )

```

## Solutions

### C++ Solution:



```

/*
 * Problem: Find the Encrypted String
 * Difficulty: Easy
 * Tags: string
 *
 * 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 getEncryptedString(string s, int k) {

    }
};

```

### Java Solution:

```

/**
 * Problem: Find the Encrypted String
 * Difficulty: Easy
 * Tags: string
 *
 * 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 getEncryptedString(String s, int k) {

    }
}

```

### Python3 Solution:

```

"""
Problem: Find the Encrypted String
Difficulty: Easy
Tags: string

```

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 getEncryptedString(self, s: str, k: int) -> str:
```

```
# TODO: Implement optimized solution
```

```
pass
```

### Python Solution:

```
class Solution(object):
```

```
def getEncryptedString(self, s, k):
```

```
"""
```

```
:type s: str
```

```
:type k: int
```

```
:rtype: str
```

```
"""
```

### JavaScript Solution:

```
/**
```

```
 * Problem: Find the Encrypted String
```

```
 * Difficulty: Easy
```

```
 * Tags: string
```

```
 *
```

```
 * 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 {string} s
```

```
 * @param {number} k
```

```
 * @return {string}
```

```
 */
```

```
var getEncryptedString = function(s, k) {
```

```
};
```

## TypeScript Solution:

```
/**
 * Problem: Find the Encrypted String
 * Difficulty: Easy
 * Tags: string
 *
 * 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 getEncryptedString(s: string, k: number): string {

};
```

## C# Solution:

```
/*
 * Problem: Find the Encrypted String
 * Difficulty: Easy
 * Tags: string
 *
 * 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 GetEncryptedString(string s, int k) {

    }
}
```

## C Solution:

```
/*
 * Problem: Find the Encrypted String
 * Difficulty: Easy
 * Tags: string
 *
 * 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* getEncryptedString(char* s, int k) {

}

```

### Go Solution:

```

// Problem: Find the Encrypted String
// Difficulty: Easy
// Tags: string
//
// 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 getEncryptedString(s string, k int) string {

}

```

### Kotlin Solution:

```

class Solution {
    fun getEncryptedString(s: String, k: Int): String {

    }
}

```

### Swift Solution:

```

class Solution {
    func getEncryptedString(_ s: String, _ k: Int) -> String {

    }
}

```

### Rust Solution:

```

// Problem: Find the Encrypted String
// Difficulty: Easy

```

```

// Tags: string
//
// 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 get_encrypted_string(s: String, k: i32) -> String {

    }
}

```

### Ruby Solution:

```

# @param {String} s
# @param {Integer} k
# @return {String}
def get_encrypted_string(s, k)

end

```

### PHP Solution:

```

class Solution {

    /**
     * @param String $s
     * @param Integer $k
     * @return String
     */
    function getEncryptedString($s, $k) {

    }
}

```

### Dart Solution:

```

class Solution {
    String getEncryptedString(String s, int k) {

    }
}

```

```
}
```

### Scala Solution:

```
object Solution {  
  def getEncryptedString(s: String, k: Int): String = {  
  
  }  
}
```

### Elixir Solution:

```
defmodule Solution do  
  @spec get_encrypted_string(s :: String.t, k :: integer) :: String.t  
  def get_encrypted_string(s, k) do  
  
  end  
end
```

### Erlang Solution:

```
-spec get_encrypted_string(S :: unicode:unicode_binary(), K :: integer()) ->  
  unicode:unicode_binary().  
get_encrypted_string(S, K) ->  
  .
```

### Racket Solution:

```
(define/contract (get-encrypted-string s k)  
  (-> string? exact-integer? string?)  
  )
```