

# Problem 1108: Defanging an IP Address

## Problem Information

Difficulty: Easy

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

Given a valid (IPv4) IP

address

, return a defanged version of that IP address.

A

defanged IP address

replaces every period

"."

with

"[.]"

.

Example 1:

Input:

address = "1.1.1.1"

Output:

"1[.]1[.]1[.]1"

Example 2:

Input:

address = "255.100.50.0"

Output:

"255[.]100[.]50[.]0"

Constraints:

The given

address

is a valid IPv4 address.

## Code Snippets

**C++:**

```
class Solution {
public:
    string defangIPaddr(string address) {

    }
};
```

**Java:**

```
class Solution {
    public String defangIPaddr(String address) {

    }
}
```

```
}
```

### Python3:

```
class Solution:
    def defangIPaddr(self, address: str) -> str:
```

### Python:

```
class Solution(object):
    def defangIPaddr(self, address):
        """
        :type address: str
        :rtype: str
        """
```

### JavaScript:

```
/**
 * @param {string} address
 * @return {string}
 */
var defangIPaddr = function(address) {

};
```

### TypeScript:

```
function defangIPaddr(address: string): string {

};
```

### C#:

```
public class Solution {
    public string DefangIPaddr(string address) {

    }
}
```

### C:

```
char * defangIPaddr(char * address){  
  
}
```

### Go:

```
func defangIPaddr(address string) string {  
  
}
```

### Kotlin:

```
class Solution {  
    fun defangIPaddr(address: String): String {  
  
    }  
}
```

### Swift:

```
class Solution {  
    func defangIPaddr(_ address: String) -> String {  
  
    }  
}
```

### Rust:

```
impl Solution {  
    pub fn defang_ip_addr(address: String) -> String {  
  
    }  
}
```

### Ruby:

```
# @param {String} address  
# @return {String}  
def defang_ip_addr(address)  
  
end
```

## PHP:

```
class Solution {  
  
    /**  
     * @param String $address  
     * @return String  
     */  
    function defangIPaddr($address) {  
  
    }  
}
```

## Scala:

```
object Solution {  
    def defangIPaddr(address: String): String = {  
  
    }  
}
```

## Solutions

### C++ Solution:

```
/*  
 * Problem: Defanging an IP Address  
 * 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 defangIPaddr(string address) {  
  
    }  
};
```

## Java Solution:

```
/**
 * Problem: Defanging an IP Address
 * 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 defangIPAddr(String address) {

    }
}
```

## Python3 Solution:

```
"""
Problem: Defanging an IP Address
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 defangIPAddr(self, address: str) -> str:
        # TODO: Implement optimized solution
        pass
```

## Python Solution:

```
class Solution(object):
    def defangIPAddr(self, address):
        """
        :type address: str
        :rtype: str
```

```
"""
```

### JavaScript Solution:

```
/**
 * Problem: Defanging an IP Address
 * 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} address
 * @return {string}
 */
var defangIPAddr = function(address) {

};
```

### TypeScript Solution:

```
/**
 * Problem: Defanging an IP Address
 * 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 defangIPAddr(address: string): string {

};
```

### C# Solution:

```

/*
 * Problem: Defanging an IP Address
 * 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 DefangIPAddr(string address) {

    }
}

```

### C Solution:

```

/*
 * Problem: Defanging an IP Address
 * 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 * defangIPAddr(char * address){

}

```

### Go Solution:

```

// Problem: Defanging an IP Address
// 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 defangIPAddr(address string) string {

}
```

### Kotlin Solution:

```
class Solution {
    fun defangIPAddr(address: String): String {

    }
}
```

### Swift Solution:

```
class Solution {
    func defangIPAddr(_ address: String) -> String {

    }
}
```

### Rust Solution:

```
// Problem: Defanging an IP Address
// 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 defang_ip_addr(address: String) -> String {

    }
}
```

### Ruby Solution:

```
# @param {String} address
# @return {String}
def defang_i_paddr(address)

end
```

### PHP Solution:

```
class Solution {

    /**
     * @param String $address
     * @return String
     */
    function defangIPaddr($address) {

    }

}
```

### Scala Solution:

```
object Solution {
    def defangIPaddr(address: String): String = {

    }

}
```