

Problem 1929: Concatenation of Array

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given an integer array

nums

of length

n

, you want to create an array

ans

of length

2n

where

$\text{ans}[i] == \text{nums}[i]$

and

$\text{ans}[i + n] == \text{nums}[i]$

for

$0 \leq i < n$

(

0-indexed

).

Specifically,

ans

is the

concatenation

of two

nums

arrays.

Return

the array

ans

.

Example 1:

Input:

nums = [1,2,1]

Output:

[1,2,1,1,2,1]

Explanation:

The array ans is formed as follows: - ans =
[nums[0],nums[1],nums[2],nums[0],nums[1],nums[2]] - ans = [1,2,1,1,2,1]

Example 2:

Input:

nums = [1,3,2,1]

Output:

[1,3,2,1,1,3,2,1]

Explanation:

The array ans is formed as follows: - ans =
[nums[0],nums[1],nums[2],nums[3],nums[0],nums[1],nums[2],nums[3]] - ans =
[1,3,2,1,1,3,2,1]

Constraints:

n == nums.length

1 <= n <= 1000

1 <= nums[i] <= 1000

Code Snippets

C++:

```
class Solution {
public:
    vector<int> getConcatenation(vector<int>& nums) {
}
```

```
};
```

Java:

```
class Solution {  
    public int[] getConcatenation(int[] nums) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def getConcatenation(self, nums: List[int]) -> List[int]:
```

Python:

```
class Solution(object):  
    def getConcatenation(self, nums):  
        """  
        :type nums: List[int]  
        :rtype: List[int]  
        """
```

JavaScript:

```
/**  
 * @param {number[]} nums  
 * @return {number[]}   
 */  
var getConcatenation = function(nums) {  
  
};
```

TypeScript:

```
function getConcatenation(nums: number[]): number[] {  
  
};
```

C#:

```
public class Solution {  
    public int[] GetConcatenation(int[] nums) {  
  
    }  
}
```

C:

```
/**  
 * Note: The returned array must be malloced, assume caller calls free().  
 */  
int* getConcatenation(int* nums, int numsSize, int* returnSize) {  
  
}
```

Go:

```
func getConcatenation(nums []int) []int {  
  
}
```

Kotlin:

```
class Solution {  
    fun getConcatenation(nums: IntArray): IntArray {  
  
    }  
}
```

Swift:

```
class Solution {  
    func getConcatenation(_ nums: [Int]) -> [Int] {  
  
    }  
}
```

Rust:

```
impl Solution {  
    pub fn get_concatenation(nums: Vec<i32>) -> Vec<i32> {  
  
    }
```

```
}
```

Ruby:

```
# @param {Integer[]} nums
# @return {Integer[]}
def get_concatenation(nums)

end
```

PHP:

```
class Solution {

    /**
     * @param Integer[] $nums
     * @return Integer[]
     */
    function getConcatenation($nums) {

    }
}
```

Dart:

```
class Solution {
List<int> getConcatenation(List<int> nums) {

}
```

Scala:

```
object Solution {
def getConcatenation(nums: Array[Int]): Array[Int] = {

}
```

Elixir:

```

defmodule Solution do
  @spec get_concatenation(nums :: [integer]) :: [integer]
  def get_concatenation(nums) do
    end
  end

```

Erlang:

```

-spec get_concatenation(Nums :: [integer()]) -> [integer()].
get_concatenation(Nums) ->
  .

```

Racket:

```

(define/contract (get-concatenation nums)
  (-> (listof exact-integer?) (listof exact-integer?))
  )

```

Solutions

C++ Solution:

```

/*
 * Problem: Concatenation of Array
 * Difficulty: Easy
 * Tags: array
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
public:
vector<int> getConcatenation(vector<int>& nums) {
  }
};

```

Java Solution:

```

/**
 * Problem: Concatenation of Array
 * Difficulty: Easy
 * Tags: array
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
public int[] getConcatenation(int[] nums) {

}
}

```

Python3 Solution:

```

"""
Problem: Concatenation of Array
Difficulty: Easy
Tags: array

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(1) to O(n) depending on approach
"""

class Solution:
    def getConcatenation(self, nums: List[int]) -> List[int]:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def getConcatenation(self, nums):
        """
:type nums: List[int]
:rtype: List[int]
"""

```

JavaScript Solution:

```
/**  
 * Problem: Concatenation of Array  
 * Difficulty: Easy  
 * Tags: array  
 *  
 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)  
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 */  
  
/**  
 * @param {number[]} nums  
 * @return {number[]}   
 */  
var getConcatenation = function(nums) {  
  
};
```

TypeScript Solution:

```
/**  
 * Problem: Concatenation of Array  
 * Difficulty: Easy  
 * Tags: array  
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 * Approach: Use two pointers or sliding window technique  
 * Time Complexity: O(n) or O(n log n)  
 * Space Complexity: O(1) to O(n) depending on approach  
 */  
  
function getConcatenation(nums: number[]): number[] {  
  
};
```

C# Solution:

```
/*  
 * Problem: Concatenation of Array  
 * Difficulty: Easy  
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 */
```

```

* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(1) to O(n) depending on approach
*/
public class Solution {
    public int[] GetConcatenation(int[] nums) {
        }
    }
}

```

C Solution:

```

/*
 * Problem: Concatenation of Array
 * Difficulty: Easy
 * Tags: array
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
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*/
/***
 * Note: The returned array must be malloced, assume caller calls free().
 */
int* getConcatenation(int* nums, int numsSize, int* returnSize) {
}

```

Go Solution:

```

// Problem: Concatenation of Array
// Difficulty: Easy
// Tags: array
//
// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

func getConcatenation(nums []int) []int {
}

```

```
}
```

Kotlin Solution:

```
class Solution {  
    fun getConcatenation(nums: IntArray): IntArray {  
          
        }  
    }  
}
```

Swift Solution:

```
class Solution {  
    func getConcatenation(_ nums: [Int]) -> [Int] {  
          
        }  
    }  
}
```

Rust Solution:

```
// Problem: Concatenation of Array  
// Difficulty: Easy  
// Tags: array  
  
// Approach: Use two pointers or sliding window technique  
// Time Complexity: O(n) or O(n log n)  
// Space Complexity: O(1) to O(n) depending on approach  
  
impl Solution {  
    pub fn get_concatenation(nums: Vec<i32>) -> Vec<i32> {  
          
        }  
    }  
}
```

Ruby Solution:

```
# @param {Integer[]} nums  
# @return {Integer[]}  
def get_concatenation(nums)
```

```
end
```

PHP Solution:

```
class Solution {  
  
    /**  
     * @param Integer[] $nums  
     * @return Integer[]  
     */  
    function getConcatenation($nums) {  
  
    }  
}
```

Dart Solution:

```
class Solution {  
List<int> getConcatenation(List<int> nums) {  
  
}  
}
```

Scala Solution:

```
object Solution {  
def getConcatenation(nums: Array[Int]): Array[Int] = {  
  
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Elixir Solution:

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defmodule Solution do  
@spec get_concatenation(nums :: [integer]) :: [integer]  
def get_concatenation(nums) do  
  
end  
end
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Erlang Solution:

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-spec get_concatenation(Nums :: [integer()]) -> [integer()].  
get_concatenation(Nums) ->  
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