

Problem 3688: Bitwise OR of Even Numbers in an Array

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

You are given an integer array

nums

Return the bitwise

OR

of all

even

numbers in the array.

If there are no even numbers in

nums

, return 0.

Example 1:

Input:

nums = [1,2,3,4,5,6]

Output:

6

Explanation:

The even numbers are 2, 4, and 6. Their bitwise OR equals 6.

Example 2:

Input:

nums = [7,9,11]

Output:

0

Explanation:

There are no even numbers, so the result is 0.

Example 3:

Input:

nums = [1,8,16]

Output:

24

Explanation:

The even numbers are 8 and 16. Their bitwise OR equals 24.

Constraints:

$1 \leq \text{nums.length} \leq 100$

$1 \leq \text{nums[i]} \leq 100$

Code Snippets

C++:

```
class Solution {
public:
    int evenNumberBitwiseORs(vector<int>& nums) {
        ...
    }
};
```

Java:

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

Python3:

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

Python:

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

JavaScript:

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

TypeScript:

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

C#:

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

C:

```
int evenNumberBitwiseORs(int* nums, int numsSize) {  
  
}
```

Go:

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

Kotlin:

```
class Solution {  
    fun evenNumberBitwiseORs(nums: IntArray): Int {  
  
    }  
}
```

Swift:

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

Rust:

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

Ruby:

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

PHP:

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

Dart:

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

Scala:

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

Elixir:

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

Erlang:

```
-spec even_number_bitwise_o_rs(Nums :: [integer()]) -> integer().  
even_number_bitwise_o_rs(Nums) ->  
.
```

Racket:

```
(define/contract (even-number-bitwise-o-rs nums)  
  (-> (listof exact-integer?) exact-integer?)  
)
```

Solutions

C++ Solution:

```
/*  
 * Problem: Bitwise OR of Even Numbers in an 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 evenNumberBitwiseORs(vector<int>& nums) {  
  
    }  
};
```

Java Solution:

```
/**  
 * Problem: Bitwise OR of Even Numbers in an 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 evenNumberBitwiseORs(int[] nums) {  
  
}  
}
```

Python3 Solution:

```
"""  
Problem: Bitwise OR of Even Numbers in an 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 evenNumberBitwiseORs(self, nums: List[int]) -> int:  
        # TODO: Implement optimized solution
```

```
pass
```

Python Solution:

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

```

JavaScript Solution:

```
/**
 * Problem: Bitwise OR of Even Numbers in an 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
 */

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

};


```

TypeScript Solution:

```
/**
 * Problem: Bitwise OR of Even Numbers in an 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

```

```
*/\n\nfunction evenNumberBitwiseORs(nums: number[]): number {\n};
```

C# Solution:

```
/*\n * Problem: Bitwise OR of Even Numbers in an Array\n * Difficulty: Easy\n * Tags: array\n *\n * Approach: Use two pointers or sliding window technique\n * Time Complexity: O(n) or O(n log n)\n * Space Complexity: O(1) to O(n) depending on approach\n */\n\npublic class Solution {\n    public int EvenNumberBitwiseORs(int[] nums) {\n\n    }\n}
```

C Solution:

```
/*\n * Problem: Bitwise OR of Even Numbers in an Array\n * Difficulty: Easy\n * Tags: array\n *\n * Approach: Use two pointers or sliding window technique\n * Time Complexity: O(n) or O(n log n)\n * Space Complexity: O(1) to O(n) depending on approach\n */\n\nint evenNumberBitwiseORs(int* nums, int numsSize) {\n}
```

Go Solution:

```

// Problem: Bitwise OR of Even Numbers in an 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 evenNumberBitwiseORs(nums []int) int {

}

```

Kotlin Solution:

```

class Solution {
    fun evenNumberBitwiseORs(nums: IntArray): Int {
        return 0
    }
}

```

Swift Solution:

```

class Solution {
    func evenNumberBitwiseORs(_ nums: [Int]) -> Int {
        return 0
    }
}

```

Rust Solution:

```

// Problem: Bitwise OR of Even Numbers in an 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 even_number_bitwise_o_rs(nums: Vec<i32>) -> i32 {
        return 0
    }
}

```

```
}
```

Ruby Solution:

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

end
```

PHP Solution:

```
class Solution {

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

    }
}
```

Dart Solution:

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

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Scala Solution:

```
object Solution {
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}
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Elixir Solution:

```
defmodule Solution do
@spec even_number_bitwise_o_rs(nums :: [integer]) :: integer
def even_number_bitwise_o_rs(nums) do

end
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Erlang Solution:

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(define/contract (even-number-bitwise-o-rs nums)
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