

# 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_or(nums :: [integer]) :: integer  
  def even_number_bitwise_or(nums) do  
  
  end  
end
```

### Erlang:

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

### Racket:

```
(define/contract (even-number-bitwise-or 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  
 */
```

```

*/

function evenNumberBitwiseORs(nums: number[]): number {

};

```

### 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)
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 */

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

    }
}

```

### 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
 */

int evenNumberBitwiseORs(int* nums, int numsSize) {

}

```

### 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 {

    }
}
```

### Swift Solution:

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

    }
}
```

### 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 {

    }
}
```

```
}
```

### 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) {

  }

}
```

### Scala Solution:

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

  }

}
```

### Elixir Solution:

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

  end
end
```

### Erlang Solution:

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

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