Problem 3688: Bitwise OR of Even Numbers in an Array

Problem Information

Difficulty: Easy
Acceptance Rate: 81.70%
Paid Only: No
Tags: Array, Bit Manipulation, Simulation

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 <= nums.length <= 100` * `1 <= nums[i] <= 100`

Code Snippets

C++:

```cpp
class Solution {
public:
    int evenNumberBitwiseORs(vector<int>& nums) {

    }
};
```

Java:

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

    }
}
```

Python3:

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