Problem 190: Reverse Bits

Problem Information

Difficulty: Easy
Acceptance Rate: 64.98%
Paid Only: No
Tags: Divide and Conquer, Bit Manipulation

Problem Description

Reverse bits of a given 32 bits signed integer.

Example 1:

Input: n = 43261596

Output: 964176192

Explanation:

Integer | Binary ---|--- 43261596 | 00000010100101000001111010011100 964176192 | 00111001011110000010100101000000 **Example 2:**

Input: n = 2147483644

Output: 1073741822

Explanation:

Integer | Binary ---|--- 2147483644 | 01111111111111111111111111111100 1073741822 | 00111111111111111111111111111110

Constraints:

* `0 <= n <= 231 - 2` * `n` is even.

Follow up: If this function is called many times, how would you optimize it?

Code Snippets

C++:

```
class Solution {
public:
int reverseBits(int n) {

}
};
```

Java:

```
class Solution {
public int reverseBits(int n) {

}
}
```

Python3:

```
class Solution:
def reverseBits(self, n: int) -> int:
```