Problem 476: Number Complement

Problem Information

Difficulty: Easy
Acceptance Rate: 70.43%
Paid Only: No
Tags: Bit Manipulation

Problem Description

The **complement** of an integer is the integer you get when you flip all the `0`'s to `1`'s and all the `1`'s to `0`'s in its binary representation.

* For example, The integer `5` is `"101"` in binary and its **complement** is `"010"` which is the integer `2`.

Given an integer `num`, return _its complement_.

Example 1:

Input: num = 5 **Output:** 2 **Explanation:** The binary representation of 5 is 101 (no leading zero bits), and its complement is 010. So you need to output 2.

Example 2:

Input: num = 1 **Output:** 0 **Explanation:** The binary representation of 1 is 1 (no leading zero bits), and its complement is 0. So you need to output 0.

Constraints:

* `1 <= num < 231`

Note: This question is the same as 1009: <https://leetcode.com/problems/complement-of-base-10-integer/>

Code Snippets

C++:

```
class Solution {
public:
int findComplement(int num) {

}
};
```

Java:

```
class Solution {
public int findComplement(int num) {

}
}
```

Python3:

```
class Solution:
def findComplement(self, num: int) -> int:
```