

## 476. Number Complement

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:

- $1 \leq \text{num} < 2^{31}$

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