

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 `n`, return *its complement*.

Example 1:

Input: `n = 5`

Output: 2

Explanation: 5 is "101" in binary, with complement "010" in binary, which is 2 in base-10.

Example 2:

Input: `n = 7`

Output: 0

Explanation: 7 is "111" in binary, with complement "000" in binary, which is 0 in base-10.

Example 3:

Input: `n = 10`

Output: 5

Explanation: 10 is "1010" in binary, with complement "0101" in binary, which is 5 in base-10.

Constraints:

- $0 \leq n < 10^9$