You are given a positive integer n, you can do the following operation **any** number of times:

* Add or subtract a **power** of 2 from n.

Return *the* ***minimum*** *number of operations to make* n *equal to* 0.

A number x is power of 2 if x == 2i where i >= 0*.*

**Example 1:**

Input: n = 39  
Output: 3  
Explanation: We can do the following operations:  
- Add 20 = 1 to n, so now n = 40.  
- Subtract 23 = 8 from n, so now n = 32.  
- Subtract 25 = 32 from n, so now n = 0.  
It can be shown that 3 is the minimum number of operations we need to make n equal to 0.

**Example 2:**

Input: n = 54  
Output: 3  
Explanation: We can do the following operations:  
- Add 21 = 2 to n, so now n = 56.  
- Add 23 = 8 to n, so now n = 64.  
- Subtract 26 = 64 from n, so now n = 0.  
So the minimum number of operations is 3.

**Constraints:**

* 1 <= n <= 105