Minimum Operations to Reduce an Integer to 0

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 $x == 2^i$ where $i >= 0$.

Example 1:

Input: n = 39

Output: 3

Explanation: We can do the following operations:

- Add $2^0 = 1$ to n, so now n = 40.

- Subtract $2^3 = 8$ from n, so now n = 32.

- Subtract $2^5 = 32$ 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 $2^1 = 2$ to n, so now n = 56.

- Add $2^3 = 8$ to n, so now n = 64.

- Subtract $2^6 = 64$ from n, so now n = 0.

So the minimum number of operations is 3.

Constraints:

- $1 <= n <= 10^5$