

1558. Minimum Numbers of Function Calls to Make Target Array

Description

You are given an integer array `nums`. You have an integer array `arr` of the same length with all values set to `0` initially. You also have the following `modify` function:

```
func modify(arr, op, idx){
    //add by 1 index idx
    if (op == 0) {
        arr[idx] = arr[idx] + 1
    }
    //multiply by 2 all elements
    if (op == 1) {
        for(i = 0; i < arr.length; i++) {
            arr[i] = arr[i] * 2
        }
    }
}
```

You want to use the modify function to convert `arr` to `nums` using the minimum number of calls.

Return *the minimum number of function calls to make* `nums` *from* `arr`.

The test cases are generated so that the answer fits in a **32-bit** signed integer.

Example 1:

Input: `nums = [1,5]`
Output: `5`
Explanation: Increment by 1 (second element): `[0, 0]` to get `[0, 1]` (1 operation).
Double all the elements: `[0, 1]` -> `[0, 2]` -> `[0, 4]` (2 operations).
Increment by 1 (both elements) `[0, 4]` -> `[1, 4]` -> `[1, 5]` (2 operations).
Total of operations: `1 + 2 + 2 = 5`.

Example 2:

Input: `nums = [2,2]`
Output: `3`
Explanation: Increment by 1 (both elements) `[0, 0]` -> `[0, 1]` -> `[1, 1]` (2 operations).
Double all the elements: `[1, 1]` -> `[2, 2]` (1 operation).
Total of operations: `2 + 1 = 3`.

Example 3:

Input: `nums = [4,2,5]`
Output: `6`
Explanation: (initial) `[0,0,0]` -> `[1,0,0]` -> `[1,0,1]` -> `[2,0,2]` -> `[2,1,2]` -> `[4,2,4]` -> `[4,2,5]` (`nums`).

Constraints:

- `1 <= nums.length <= 105`
- `0 <= nums[i] <= 109`

