5467. Find a Value of a Mysterious Function Closest to Target

ons (/contest/weekly-contest-198/problems/find-a-value-of-a-mysterious-function-closest-to-target/submissions/)

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User Accepted: 0

User Tried: 2

Total Accepted: 0

Total Submissions: 2

Difficulty: Hard
```

```
func(arr, 1, r) {
    if (r < 1) {
        return -10000000000
    }
    ans = arr[1]
    for (i = l + 1; i <= r; i++) {
        ans = ans & arr[i]
    }
    return ans
}</pre>
```

Winston was given the above mysterious function func . He has an integer array arr and an integer target and he wants to find the values l and r that make the value |func(arr, l, r) - target| minimum possible.

Return the minimum possible value of |func(arr, l, r) - target|.

Notice that func should be called with the values 1 and r where $0 \le 1$, r < arr.length.

Example 1:

```
Input: arr = [9,12,3,7,15], target = 5
Output: 2
Explanation: Calling func with all the pairs of [l,r] = [[0,0],[1,1],[2,2],[3,3],[4,4],[0,
```

Example 2:

```
Input: arr = [1000000,1000000,1000000], target = 1
Output: 999999
Explanation: Winston called the func with all possible values of [l,r] and he always got 1
```

Example 3:

```
Input: arr = [1,2,4,8,16], target = 0
Output: 0
```

Constraints:

- 1 <= arr.length <= 10^5
- 1 <= arr[i] <= 10^6
- 0 <= target <= 10^7

