

We have a collection of stones, each stone has a positive integer weight.

Each turn, we choose the two heaviest stones and smash them together. Suppose the stones have weights x and y with $x \leq y$. The result of this smash is:

- If $x == y$, both stones are totally destroyed;
- If $x \neq y$, the stone of weight x is totally destroyed, and the stone of weight y has new weight $y-x$.

At the end, there is at most 1 stone left. Return the weight of this stone (or 0 if there are no stones left).

Example 1:

Input: [2,7,4,1,8,1]

Output: 1

Explanation:

We combine 7 and 8 to get 1 so the array converts to [2,4,1,1,1] then,

we combine 2 and 4 to get 2 so the array converts to [2,1,1,1] then,

we combine 2 and 1 to get 1 so the array converts to [1,1,1] then,

we combine 1 and 1 to get 0 so the array converts to [1] then that's the value of last stone.

Note:

- $1 \leq \text{stones.length} \leq 30$
- $1 \leq \text{stones}[i] \leq 1000$