6120. Maximum Number of Pairs in Array

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User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

You are given a **0-indexed** integer array `nums`. In one operation, you may do the following:

- Choose **two** integers in `nums` that are **equal**.
- Remove both integers from `nums`, forming a **pair**.

The operation is done on `nums` as many times as possible.

Return *a **0-indexed** integer array* `answer` *of size* `2` *where* `answer[0]` *is the number of pairs that are formed and* `answer[1]` *is the number of leftover integers in* `nums` *after doing the operation as many times as possible.*

Example 1:

```
Input: nums = [1,3,2,1,3,2,2]
Output: [3,1]
Explanation:
Form a pair with nums[0] and nums[3] and remove them from nums. Now, nums = [3,2,3,2,2].
Form a pair with nums[0] and nums[2] and remove them from nums. Now, nums = [2,2,2].
Form a pair with nums[0] and nums[1] and remove them from nums. Now, nums = [2].
No more pairs can be formed. A total of 3 pairs have been formed, and there is 1 number leftover in nums.
```

Example 2:

```
Input: nums = [1,1]
Output: [1,0]
Explanation: Form a pair with nums[0] and nums[1] and remove them from nums. Now, nums = [].
No more pairs can be formed. A total of 1 pair has been formed, and there are 0 numbers leftover in nums.
```

Example 3:

```
Input: nums = [0]
Output: [0,1]
Explanation: No pairs can be formed, and there is 1 number leftover in nums.
```

Constraints:

- `1 <= nums.length <= 100`
- `0 <= nums[i] <= 100`

JavaScript

```javascript
const counter = (a_or_s) => { let m = new Map(); for (const x of a_or_s) m.set(x, m.get(x) + 1 || 1); return m; };
const removeOneOrManyMap = (m, x, cnt = 1) => { let occ = m.get(x); occ > cnt ? m.set(x, occ - cnt) : m.delete(x); };

const numberOfPairs = (a) => {
    let m = counter(a), op = 0, rest = 0;
    while (1) {
        let remove = false;
        for (const [x, occ] of m) {
            if (occ > 1) {
                removeOneOrManyMap(m, x, 2);
                remove = true;
                op++;
                break;
            }
        }
        if (!remove) break;
    }
    for (const [, occ] of m) rest += occ;
    return [op, rest];
};
```

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