

# 3092. Most Frequent IDs

## Description

The problem involves tracking the frequency of IDs in a collection that changes over time. You have two integer arrays, `nums` and `freq`, of equal length `n`. Each element in `nums` represents an ID, and the corresponding element in `freq` indicates how many times that ID should be added to or removed from the collection at each step.

- **Addition of IDs:** If `freq[i]` is positive, it means `freq[i]` IDs with the value `nums[i]` are added to the collection at step `i`.
- **Removal of IDs:** If `freq[i]` is negative, it means `-freq[i]` IDs with the value `nums[i]` are removed from the collection at step `i`.

Return an array `ans` of length `n`, where `ans[i]` represents the **count** of the *most frequent ID* in the collection after the `ith` step. If the collection is empty at any step, `ans[i]` should be 0 for that step.

### Example 1:

**Input:** `nums = [2,3,2,1]`, `freq = [3,2,-3,1]`

**Output:** `[3,3,2,2]`

#### Explanation:

After step 0, we have 3 IDs with the value of 2. So `ans[0] = 3`.  
After step 1, we have 3 IDs with the value of 2 and 2 IDs with the value of 3. So `ans[1] = 3`.  
After step 2, we have 2 IDs with the value of 3. So `ans[2] = 2`.  
After step 3, we have 2 IDs with the value of 3 and 1 ID with the value of 1. So `ans[3] = 2`.

### Example 2:

**Input:** `nums = [5,5,3]`, `freq = [2,-2,1]`

**Output:** `[2,0,1]`

#### Explanation:

After step 0, we have 2 IDs with the value of 5. So `ans[0] = 2`.  
After step 1, there are no IDs. So `ans[1] = 0`.  
After step 2, we have 1 ID with the value of 3. So `ans[2] = 1`.

### Constraints:

- `1 <= nums.length == freq.length <= 105`
- `1 <= nums[i] <= 105`
- `-105 <= freq[i] <= 105`
- `freq[i] != 0`
- The input is generated such that the occurrences of an ID will not be negative in any step.

