

2363. Merge Similar Items

My Submissions (/contest/biweekly-contest-84/problems/merge-similar-items/submissions/)

Back to Contest (/contest/biweekly-contest-84/)

You are given two 2D integer arrays, `items1` and `items2`, representing two sets of items. Each array `items` has the following properties:

- `items[i] = [valuei, weighti]` where `valuei` represents the **value** and `weighti` represents the **weight** of the `ith` item.
- The value of each item in `items` is **unique**.

Return a 2D integer array `ret` where `ret[i] = [valuei, weighti]`, with `weighti` being the **sum of weights** of all items with value `valuei`.

Note: `ret` should be returned in **ascending** order by value.

| | |
|--------------------|-------|
| User Accepted: | 10741 |
| User Tried: | 11376 |
| Total Accepted: | 11241 |
| Total Submissions: | 15840 |
| Difficulty: | Easy |

Example 1:

Input: `items1 = [[1,1],[4,5],[3,8]], items2 = [[3,1],[1,5]]`
Output: `[[1,6],[3,9],[4,5]]`
Explanation:
The item with value = 1 occurs in `items1` with weight = 1 and in `items2` with weight = 5, total weight = 1 + 5 = 6.
The item with value = 3 occurs in `items1` with weight = 8 and in `items2` with weight = 1, total weight = 8 + 1 = 9.
The item with value = 4 occurs in `items1` with weight = 5, total weight = 5.
Therefore, we return `[[1,6],[3,9],[4,5]]`.

Example 2:

Input: `items1 = [[1,1],[3,2],[2,3]], items2 = [[2,1],[3,2],[1,3]]`
Output: `[[1,4],[2,4],[3,4]]`
Explanation:
The item with value = 1 occurs in `items1` with weight = 1 and in `items2` with weight = 3, total weight = 1 + 3 = 4.
The item with value = 2 occurs in `items1` with weight = 3 and in `items2` with weight = 1, total weight = 3 + 1 = 4.
The item with value = 3 occurs in `items1` with weight = 2 and in `items2` with weight = 2, total weight = 2 + 2 = 4.
Therefore, we return `[[1,4],[2,4],[3,4]]`.

Example 3:

Input: `items1 = [[1,3],[2,2]], items2 = [[7,1],[2,2],[1,4]]`
Output: `[[1,7],[2,4],[7,1]]`
Explanation:
The item with value = 1 occurs in `items1` with weight = 3 and in `items2` with weight = 4, total weight = 3 + 4 = 7.
The item with value = 2 occurs in `items1` with weight = 2 and in `items2` with weight = 2, total weight = 2 + 2 = 4.
The item with value = 7 occurs in `items2` with weight = 1, total weight = 1.
Therefore, we return `[[1,7],[2,4],[7,1]]`.

Constraints:

- `1 <= items1.length, items2.length <= 1000`
- `items1[i].length == items2[i].length == 2`
- `1 <= valuei, weighti <= 1000`
- Each `valuei` in `items1` is **unique**.
- Each `valuei` in `items2` is **unique**.

Discuss (https://leetcode.com/problems/merge-similar-items/discuss)

JavaScript

1

2

3

4

5

```
const addOneOrManyMap = (m, x, cnt = 1) => m.set(x, m.get(x) + cnt || cnt);
const mergeSimilarItems = (a, b) => {
  let m = new Map();
  for (const [v, w] of a) addOneOrManyMap(m, v, w);
```

```
6     for (const [v, w] of b) addOneOrManyMap(m, v, w);  
7     return Array.from(m.entries()).sort((x, y) => x[0] - y[0]);  
8 };
```

☐ Custom Testcase[Use Example Testcases](#)[Run](#)[Submit](#)**Submission Result: Accepted** (</submissions/detail/767314893/>) ⓘ[More Details > \(/submissions/detail/767314893/\)](/submissions/detail/767314893/)

Share your acceptance!

Copyright © 2022 LeetCode

[Help Center \(/support\)](/support) | [Jobs \(/jobs\)](/jobs) | [Bug Bounty \(/bugbounty\)](/bugbounty) | [Online Interview \(/interview/\)](/interview/) | [Students \(/student\)](/student) | [Terms \(/terms\)](/terms) | [Privacy Policy \(/privacy\)](/privacy)[United States \(/region\)](/region)