**Problem #2570: Merge Two 2D Arrays by Summing Values.** (Easy)

<https://leetcode.com/problems/merge-two-2d-arrays-by-summing-values/description/>

**My Solution:**

# Approach

1. Put id and value pairs from nums1 in dict1 where key = id and value = value of id.

2. Put id and value pairs from nums1 in dict1 where key = id and value = value of id.

3. Get the ids from dict1 and dict2 and make them unique using set union operation. Then convert the ids to a list and sort them in ascending order.

4. Initialize res to an empty list to hold the result.

5. Iterate through the ids. Get the value of each id from dict1 and dict2.

If the id is not in dict1, then set its value val1 to 0, and if id is in dict1, gets its value and store it in val1.

Similary if id is not in dict2, then set its value to 0, and if id is in dict2, gets its value and store it in val2.

Add the two values val1 and val2.

6. Append to res, the id and its corresponding value.

7. Return res.

# Complexity

- Time complexity:

O(n)

- Space complexity:

O(n)

# Code

```

class Solution:

def mergeArrays(self, nums1: List[List[int]], nums2: List[List[int]]) -> List[List[int]]:

dict1 = {}

for id, val in nums1:

dict1[id] = val

dict2 = {}

for id, val in nums2:

dict2[id] = val

keys1 = dict1.keys()

keys2 = dict2.keys()

keys = set(keys1).union(set(keys2))

keys = sorted(list(keys))

res = []

for id in keys:

if id in dict1:

val1 = dict1[id]

else:

val1 = 0

if id in dict2:

val2 = dict2[id]

else:

val2 = 0

res.append([id, val1 + val2])

return res

```