

406. Queue Reconstruction by Height

Description

You are given an array of people, `people`, which are the attributes of some people in a queue (not necessarily in order). Each `people[i] = [hi, ki]` represents the i^{th} person of height `hi` with **exactly** `ki` other people in front who have a height greater than or equal to `hi`.

Reconstruct and return *the queue that is represented by the input array* `people`. The returned queue should be formatted as an array `queue`, where `queue[j] = [hj, kj]` is the attributes of the j^{th} person in the queue (`queue[0]` is the person at the front of the queue).

Example 1:

Input: `people = [[7,0],[4,4],[7,1],[5,0],[6,1],[5,2]]`

Output: `[[5,0],[7,0],[5,2],[6,1],[4,4],[7,1]]`

Explanation:

Person 0 has height 5 with no other people taller or the same height in front.

Person 1 has height 7 with no other people taller or the same height in front.

Person 2 has height 5 with two persons taller or the same height in front, which is person 0 and 1.

Person 3 has height 6 with one person taller or the same height in front, which is person 1.

Person 4 has height 4 with four people taller or the same height in front, which are people 0, 1, 2, and 3.

Person 5 has height 7 with one person taller or the same height in front, which is person 1.

Hence `[[5,0],[7,0],[5,2],[6,1],[4,4],[7,1]]` is the reconstructed queue.

Example 2:

Input: `people = [[6,0],[5,0],[4,0],[3,2],[2,2],[1,4]]`

Output: `[[4,0],[5,0],[2,2],[3,2],[1,4],[6,0]]`

Constraints:

- `1 <= people.length <= 2000`
- `0 <= hi <= 106`
- `0 <= ki < people.length`
- It is guaranteed that the queue can be reconstructed.

