Suppose you have a random list of people standing in a queue. Each person is described by a pair of integers (h, k), where h is the height of the person and k is the number of people in front of this person who have a height greater than or equal to h. Write an algorithm to reconstruct the queue.

**Note:**  
The number of people is less than 1,100.

**Example**

Input:

[[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]]