Finding MokaVal

MokaChinu loves eating. Unfortunately he can eat only one food item at time. He is served many food items and out of them he chooses one with maximum taste value. Maximum taste value at any point of time is called as 'MokaVal' at that time. MokaChinu is served different food items for some fixed time interval. Let's say Li denotes the start time from which ith food item is served and Ri denotes the time at which ith food item's service has been stopped (at time Ri our MokaChinu can't eat food item i). Vi denotes taste value of ith food item. Your job is to find all the time points at which MokaVal changes.
Note : MokaVal at time 0 is 0. Time is given as integer. If at certain time there is no food item which is served to MokaChinu then assume MokaVal to be 0 at that point of time.

Input :

First line denotes number of testcases.
For each testcase :
First line denotes N , the number of food items.
next N lines denote Li , Ri and Vi for each food item on separate line.

Output :

For all time instances where MokaVal changes , print time and corresponding MokaVal at that instance of time.

Constraints:

$1 <= T <= 10$
$1 <= N <= 10^5$
$1 <= Li < Ri <= 10^6$ for all i
$1 <= Vi <= 10^6$ for all i

Sample Input :
1
5
2 9 10
3 7 15
5 12 12
15 20 10
19 24 8

Sample Output :

2 10
3 15
7 12
12 0
15 10
20 8
24 0