Find Free timing for both of them to meet each other :

Input 1 :

time 1 = [["9:00", "10:30"], ["12:00", "13:00"],
["16:00", "18:00"]]

limit 1 = ["9:00", "20:00"]

work → Start , end

Input 2 :

time 2 = [["10:00", "11:30"], ["12:30", "14:30"],
["14:30", "15:00"], ["16:00", "17:00"]]

limit 2 = ["10:00", "18:30"]

work → Start , end

Output :

[["11:30", "12:00"], ["15:00", "16:00"]
, ["18:00", "18:30"]]

Step (1) :

Compute free time for Input 1 :

time 1 = [["9:00", "10:30"], ["12:00", "13:00"], ["16:00", "18:00"]]

free_time 1 = [["10:30", "12:00"], ["13:00", "16:00"], ["18:00", "20:00"]]

↳ because the limit for input 1

["9:00", "20:00"]

Step (2) :

Compute free time for Input 2 :

time 2 = [["10:00", "11:30"], ["12:30", "14:30"],

free_time1 = [["10:30", "12:00"],
["13:00", "16:00"],
["18:00", "20:00"]]

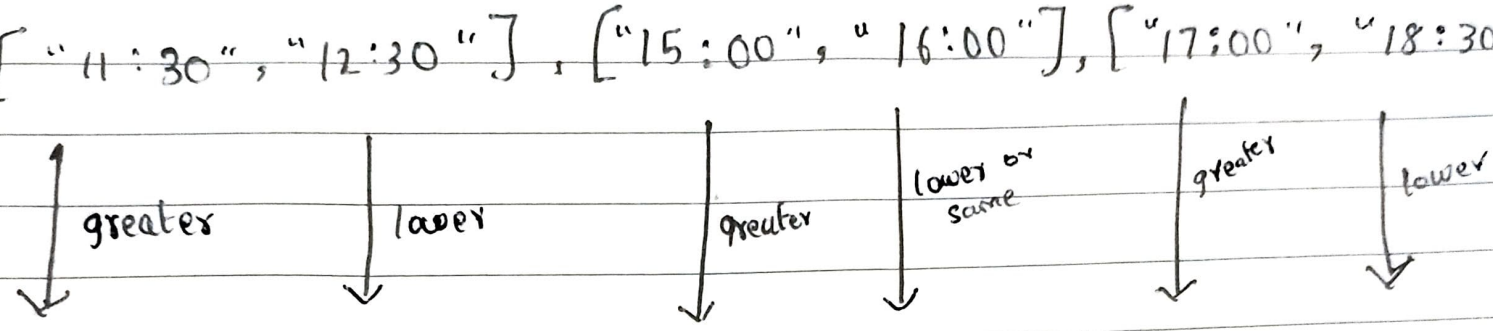
free_time2 = [["11:30", "12:30"],
["15:00", "16:00"],
["17:00", "18:30"]]

∴ These are the free times the both would be available.

Step (3) :

[["10:30", "12:00"], ["13:00", "16:00"], ["18:00", "20:00"]]

[["11:30", "12:30"], ["15:00", "16:00"], ["17:00", "18:30"]]



[["11:30", "12:00"], ["15:00", "16:00"], ["18:00", "18:30"]]

∴ so that's it mathematically,

we did it remember the steps.

[∴ go through the code in another file]