class Solution:

def merge(self, intervals: List[List[int]]) -> List[List[int]]:

merged = []

intervals.sort(key=lambda x: x[0])

prev = intervals[0]

for interval in intervals[1:]:

if interval[0] <= prev[1]:

prev[1] = max(prev[1], interval[1])

else:

merged.append(prev)

prev = interval

merged.append(prev)

return merged