

Homework 04: Merge Overlapping Intervals

Due Tuesday, October 31th, 2017

Instruction

Submit your answer to this question via PC² under your account by the posted due time. No late submissions will be accepted. Note that homework is opened-book, but no outside assistance is permitted.

Problem

Given a set of time intervals, merge all overlapping intervals into one and output the result which should have only mutually exclusive intervals. Let the intervals be represented as pairs of integers for simplicity. For example, let the given set of intervals be [1,3], [2,4], [5,7], [6,8]. The intervals [1,3] and [2,4] overlap with each other, so they should be merged and become [1, 4]. Similarly [5, 7] and [6, 8] should be merged and become [5, 8].

Write a program that merges all overlapping intervals into one and output the result which should have only mutually exclusive intervals.

Sample input

[1,3],[2,6],[8,10],[15,18]

Sample output

[1, 6], [8, 10], [15, 18]