

Combine Overlapping Ranges

Given an array of ranges where each range is represented as [begin, end], combine all overlapping ranges, and return an array of non-overlapping ranges that include all the input ranges.

Example Cases

Example 1:

Input: ranges = [[1,3],[2,6],[8,10],[15,18]]

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

Explanation: Ranges [1,3] and [2,6] overlap, so they are combined into [1,6].

Example 2:

Input: ranges = [[1,4],[4,5]]

Output: [[1,5]]

Explanation: Ranges [1,4] and [4,5] are considered overlapping.

Constraints:

$$1 \leq \text{ranges.length} \leq 10^4$$

$$\text{ranges}[i].\text{length} == 2$$

$$0 \leq \text{begin}_i \leq \text{end}_i \leq 10^4$$