

56. Merge Intervals

Given an array of intervals where $\text{intervals}[i] = [\text{start}_i, \text{end}_i]$, merge all overlapping intervals, and return *an array of the non-overlapping intervals that cover all the intervals in the input*.

Example 1:

Input: $\text{intervals} = [[1,3],[2,6],[8,10],[15,18]]$

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

Explanation: Since intervals $[1,3]$ and $[2,6]$ overlap, merge them into $[1,6]$.

Example 2:

Input: $\text{intervals} = [[1,4],[4,5]]$

Output: $[[1,5]]$

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

Constraints:

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

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

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