

## Day-39 Q-02 Insert Interval

Given a set of *non-overlapping* intervals, insert a new interval into the intervals (merge if necessary).

You may assume that the intervals were initially sorted according to their start times.

### Example 1:

**Input:** intervals = [[1,3],[6,9]], newInterval = [2,5]

**Output:** [[1,5],[6,9]]

### Example 2:

**Input:** intervals = [[1,2],[3,5],[6,7],[8,10],[12,16]], newInterval = [4,8]

**Output:** [[1,2],[3,10],[12,16]]

**Explanation:** Because the new interval [4,8] overlaps with [3,5],[6,7],[8,10].