

5806. Describe the Painting

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There is a long and thin painting that can be represented by a number line. The painting was painted with multiple overlapping segments where each segment was painted with a **unique** color. You are given a 2D integer array `segments`, where `segments[i] = [starti, endi, colori]` represents the **half-closed segment** `[starti, endi)` with `colori` as the color.

The colors in the overlapping segments of the painting were **mixed** when it was painted. When two or more colors mix, they form a new color that can be represented as a **set** of mixed colors.

- For example, if colors `2`, `4`, and `6` are mixed, then the resulting mixed color is `{2,4,6}`.

For the sake of simplicity, you should only output the **sum** of the elements in the set rather than the full set.

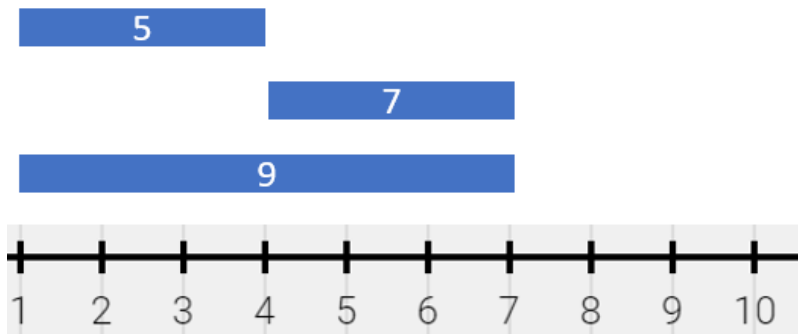
You want to **describe** the painting with the **minimum** number of non-overlapping **half-closed segments** of these mixed colors. These segments can be represented by the 2D array `painting` where `painting[j] = [leftj, rightj, mixj]` describes a **half-closed segment** `[leftj, rightj)` with the mixed color **sum** of `mixj`.

- For example, the painting created with `segments = [[1,4,5], [1,7,7]]` can be described by `painting = [[1,4,12], [4,7,7]]` because:
 - `[1,4)` is colored `{5,7}` (with a sum of `12`) from both the first and second segments.
 - `[4,7)` is colored `{7}` from only the second segment.

Return the 2D array `painting` describing the finished painting (excluding any parts that are **not** painted). You may return the segments in **any order**.

A **half-closed segment** `[a, b)` is the section of the number line between points `a` and `b` **including** point `a` and **not including** point `b`.

Example 1:



Input: `segments = [[1,4,5], [4,7,7], [1,7,9]]`

Output: `[[1,4,14], [4,7,16]]`

Explanation: The painting can be described as follows:

- `[1,4)` is colored `{5,9}` (with a sum of `14`) from the first and third segments.
- `[4,7)` is colored `{7,9}` (with a sum of `16`) from the second and third segments.

Example 2: