370. Range Addition

Assume you have an array of length ***n*** initialized with all **0**'s and are given ***k*** update operations.

Each operation is represented as a triplet: **[startIndex, endIndex, inc]** which increments each element of subarray **A[startIndex ... endIndex]** (startIndex and endIndex inclusive) with **inc**.

Return the modified array after all ***k*** operations were executed.

```
class Solution {
    public int[] getModifiedArray(int length, int[][] updates) {

        int[] res = new int[length];

        for (int[] update : updates) {
            int start = update[0];
            int end = update[1];
            int value = update[2];

            res[start] += value;

            if (end < length -1)
                res[end + 1] -= value;
        }

        int sum = 0;
        for (int i = 0; i < length; i++) {
            sum += res[i];
            res[i] = sum;
        }

        return res;
    }
}
```