

Problem 370: Range Addition

Problem Information

Difficulty: Medium

Acceptance Rate: 72.59%

Paid Only: Yes

Tags: Array, Prefix Sum

Problem Description

You are given an integer `length` and an array `updates` where `updates[i] = [startIdxi, endIdxi, inci]`.

You have an array `arr` of length `length` with all zeros, and you have some operation to apply on `arr`. In the `ith` operation, you should increment all the elements `arr[startIdxi], arr[startIdxi + 1], ..., arr[endIdxi]` by `inci` .

Return `arr` _after applying all the_ `updates`.

Example 1:

Input: length = 5, updates = [[1,3,2],[2,4,3],[0,2,-2]] **Output:** [-2,0,3,5,3]

Example 2:

Input: length = 10, updates = [[2,4,6],[5,6,8],[1,9,-4]] **Output:** [0,-4,2,2,2,4,4,-4,-4,-4]

Constraints:

* `1 <= length <= 105` * `0 <= updates.length <= 104` * `0 <= startIdxi <= endIdxi < length` * `-1000 <= inci <= 1000`

Code Snippets

C++:

```
class Solution {  
public:  
vector<int> getModifiedArray(int length, vector<vector<int>>& updates) {  
  
}  
};
```

Java:

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

Python3:

```
class Solution:  
def getModifiedArray(self, length: int, updates: List[List[int]]) ->  
List[int]:
```