Given an array of integers nums and a two-dimension array of integers operations.

Each operation in operations is represented in the form {L, R, X}. When applying an operation, all elements with index in range [L, R] (include L and R) increase by X.

Your task is to implement a function with following prototype:

vector<int> updateArrayPerRange(vector<int>& nums, vector<vector<int>>& operations);

The function returns the array after applying all operation in operations.

**Note:**

- The iostream, and vector libraries have been included and namespace std is being used. No other libraries are allowed.

- You can write helper functions.

**For example:**

| **Test** | **Result** |
| --- | --- |
| vector<int> nums {13, 0, 6, 9, 14, 16};  vector<vector<int>> operations {{5, 5, 16}, {3, 4, 0}, {0, 2, 8}};  printVector(updateArrayPerRange(nums, operations)); | [21, 8, 14, 9, 14, 32] |