# Elevate and Depress

There are N pillars, lying on a straight line. The pillars are numbered from 1 to N. You have to perform Q operations on these pillars. Each operation can be of two types:

1. Elevate L R X

This operation will increase the height of all pillars numbered from L to R (inclusive) by X.

2. Depress L R X

This operation will decrease the height of all pillars numbered from L to R (inclusive) by X.

The height of all the pillars is initially 0.

Your task is to process these Q operations, and then output the final configuration of the pillars.

## Sample Input 1

Number of pillars = 10

Number of queries = 5

1. Elevate 1 5 1
2. Elevate 4 9 1
3. Depress 3 10 2
4. Depress 1 6 1
5. Elevate 1 5 3

## Sample Output 1

[3, 3, 1, 2, 2, -2, -1, -1, -1, -2]