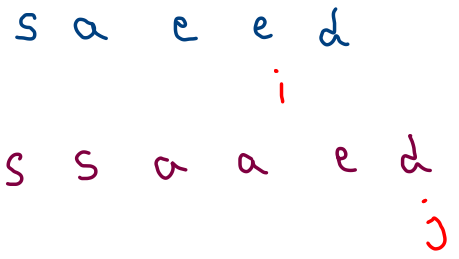
# 925. Long Pressed Name

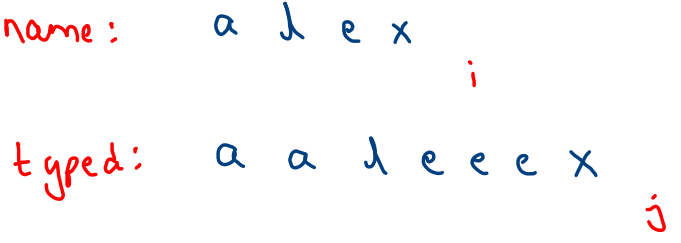
**Example 1:**

```
Input: name = "alex", typed = "aaleex"
Output: true
Explanation: 'a' and 'e' in 'alex' were long pressed.
```

**Example 2:**

```
Input: name = "saeed", typed = "ssaaedd"
Output: false
Explanation: 'e' must have been pressed twice, but it was
not in the typed output.
```



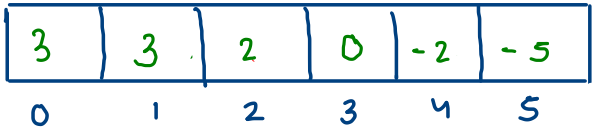

```
if (name[i] == typed[j]){
    i++;
    j++;
}
else if (typed[j] == typed[j-1])
    j++;
}
```

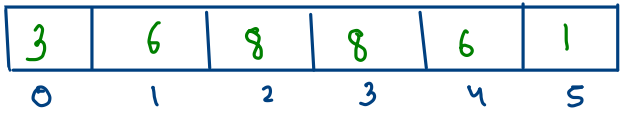
# 903 · Range Addition

K queries

(si, ei, inc)

o(n)




1, 3, +2

0, 4, +3

1, 5, +1

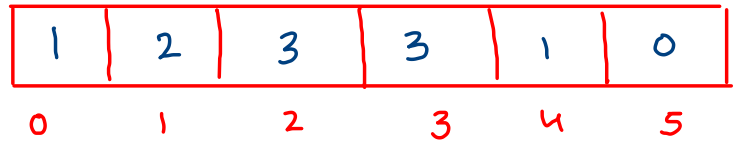
2, 4 +2

(i) prefix sum

# Max Range Queries

k = 2

There are $N$ operations. In each operation, you are given two integers $L$ and $R$, and you should increase by 1 the height of each of the cakes $L, L+1, \ldots, R$. One of these $N$ operations should be removed and the remaining $N-1$ operations are then performed.




0, 3 a → 0 1 2 2 1 0
1, 3 b → 1 1 2 2 1 0
2, 4 c → 1 2 2 2 0 0

~~n*n~~

O(n+k)

si, ei

count = total − (count of k's si to ei) + (count of k+1's si to ei)

count = total - (count of k's si to ei) + (count of k+1's si to ei)

total = 4

ck[ei] - ck[si-1]

ckpl[ei] - ckpl[si-1]

K = 3

1, 5
2, 7
0, 4
3, 8
6, 7

| 1 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 1 |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

ck, ck[i]
count of k till i

| 0 | 0 | 1 | 1 | 1 | 2 | 3 | 4 | 4 |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

ckpl, ckpl[i]
count of k+1 till i

| 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 |
|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |