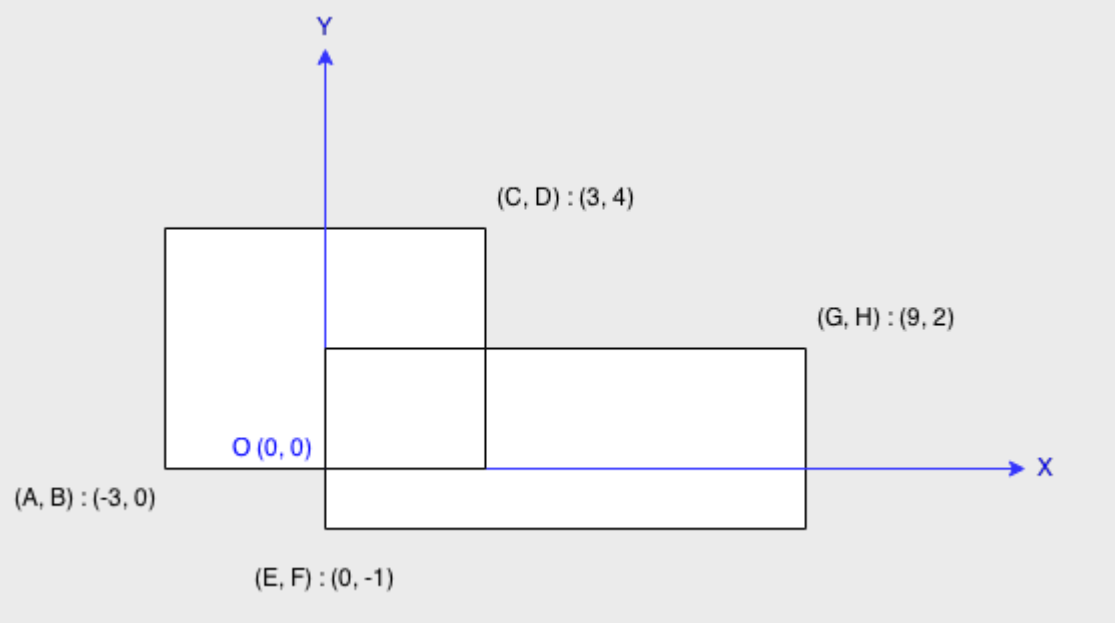
题目：

Find the total area covered by two **rectilinear** rectangles in a **2D** plane.

Each rectangle is defined by its bottom left corner and top right corner as shown in the figure.



Assume that the total area is never beyond the maximum possible value of **int**.

1.时间：O（1）；空间：O（1） ->计算公共区域面积，而且还有问题

```
class Solution {
public:
    int computeArea(int A, int B, int C, int D, int E, int F, int G, int H) {
        if ((A < E && E < C) && (B < H && H < D)){
            return (C - E) * (H - B);
```

```
        }
        if ((E < A && A < G) && (F < D && D < H)){
            return (G - A) * (D - F);
        }
        return 0;
    }
};
```

2.时间：O（1）；空间：O（1）

```
class Solution {
public:
    int computeArea(int A, int B, int C, int D, int E, int F, int
G, int H) {
        /* 计算两个矩形的面积 */
        int area = (C - A) * (D - B) + (G - E) * (H - F);
        /* 如果两个矩形没有公共区域，则直接返回 */
        if (F > D || H < B || G < A || E > C) return area;
        /* 减去两个矩形的公共区域 */
        area -= (std::min(C, G) - std::max(A, E)) * (std::min(H,
D) - std::max(B, F));
        return area;
    }
};
```