**Description** :

1.Read 2 Rectangles vertices (Top left corner co-ordinates, Bottom right corner co-ordinates)

2.

(X1, Y1)

X1-> Length\_Start of rectangle(Length\_Start)

Y1-> Height of rectangle(Height\_End)

X2-> Length\_End of rectangle(Length\_End)

Y2-> Height\_Start of rectangle(Height\_Start)

(X2,Y2)

3. Pick the rectangle for which X-Axis co-ordinate is small (For scanning the overlap with other rectangle in X-Direction)

Before that check for rectangles are adjacent in X- direction(Length), i.e One side of one rectangle should be same as starting of other rectangle side(Length)

4.Call function “intersection()” to check whether the sides of both the rectangles are parallel.

i.e exactly one above the other(Length direction)

5. Store how many points(LenOverlapCnt) the rectangles are in parallel in X-Direction and also store the starting point (LenOverlapStart)from where parallelism is started.

6. If more than 1 point of parallelism is there then we would go ahead to check for overlap in Y-Direction(Step-7 to 9) .

If not no intersection is possible

7. Pick the rectangle for which Y-Axis co-ordinate is small (For scanning the overlap with other rectangle in Y-Direction)

Before that check for rectangles are adjacent in Y- direction(Breadth), i.e end side of one rectangle should be same as starting of other rectangle side(Breadth)

8.Call function “intersection()” to check whether the sides of both the rectangles are parallel.

i.e exactly parallel to the other(Breadth direction)

9.Store how many points(HeightOverlapCnt) the rectangles are in parallel in X-Direction and also store the starting point((HeightOverlapStart)) from where parallelism is started.

10. If more than 1 point of parallelism is there then the intersection is there for 2 rectangles

Otherwise no intersection is possible.

11.Calculate the point of intersection using below variables.

LenOverlapCnt) (LenOverlapStart)

HeightOverlapCnt) ((HeightOverlapStart))

**Bottom right corner co-ordinates**

Y-Co Ordinates(bottom right) = HeightOverlapStart

X-Co Ordinates(bottom right) == LenOverlapStart + (LenOverlapCnt-1)

**Top left corner co-ordinates,**

X-Co Ordinates(top left) == LenOverlapStart

Y-Co Ordinates(bottom left) == HeightOverlapStart + (HeightOverlapCnt-1)