Apply LB algo to clip line with coordinates (30,60), and (60,20) against clipping window L(10,10) and R(50,50).

=> L(Xmin, Ymin) = (10, 10)

R(Xmax, Ymax) = (50, 50)

Given points A(x1,y1) = (30,60)

B(x2,y2) = (60,20)

Calculate pi, qi, and ri for i = 1,2,3,4

p1= -(dx) = -(x2-x1) = -(60-30) = -30

p2 = dx = 30

p3 = -(dy) = -(y2-y1) = -(20-60) = -(-40) = 40

p4 = dy = -40

Lets calculate qi

q1 = x1 - Xmin = 30 - 10 = 20

q2 = Xmax - x1 = 50 - 30 = 20

q3 = y1 - Ymin = 60 - 10 = 50

q4 = Ymax - y1 = 50 - 60 = -10

Lets compute ri

r1 = q1/p1 = 20 / (-30) = -0.67

r2 = q2/p2 = 20 / 30 = 0.67

r3 = q3/p3 = 50 / 40 = 1.25

r4 = q4/p4 = -10/-40 = 0.25

u1 = max (0, all ri having pi<0) = max(0, r1, r4) = max(0, -0.67,0.25) = 0.25

u2 = min (1, all ri having pi>0) = min(1, r2, r3) = min(1, 0.67,1.25) = 0.67

x1’ = x1 + dx u1 = 30 + (30)(0.25) = 37.5

y1’ = y1 + dy u1 = 60 + (-40)(0.25) = 50

x2’ = x1 + dx u2 = 30 + 30(0.67) = 50

y2’ = y1 + dy u2 = 60 + (-40)(0.67) = 33.2