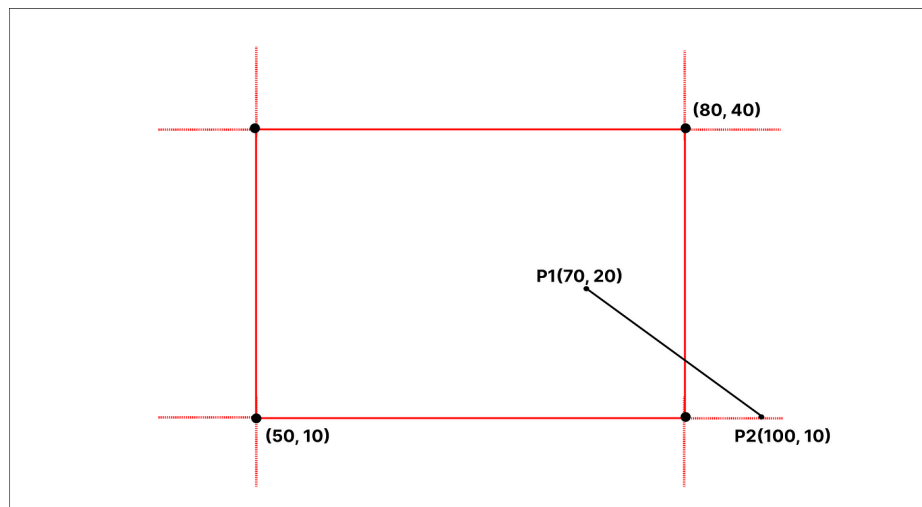Use the Cohen Sutherland Algorithm to clip the lines P1(70, 20) and P2(100, 10) against a window lower left corner (50, 10) and upper right corner (80, 40).

Given,

P1 = (70, 20), P2 = (100, 10)

(Xwmin, Ywmin) = (50, 10)

(Xwmax, Ywmax) = (80, 40)

Region Code of P1 = 0000

Region Code of P2 = 0010

P1 && P2 = 0000

The line lies partially inside the window boundary.

slope of P1.P2 = 10– 20 / 100–70. = -1/3

Slope of P1.M = y — 20/ 80–70. = y — 20/10

Since, Slope of P1.P2 == Slope of P1.M and since it is completely one single line,

- - 1/3 = y — 20/10
- 3y — 60 + 10 = 0
- 3y — 50 = 0
- y = 16.67

Visible Portion of P1.M, P1(70, 20) and M (80, 16.67)