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1. Diketahui P (1,1) Q(10,10)

Dan, Xmin=1, Ymin=1, Xmax=7, Ymax=7

Vertex P(1,1)

L=0	Xmin=1	1>=1
R=0	Xmax=1	1<7
B=0	Ymin=1	1>=1
T=0	Ymax=1	1<7

Region code vertex P = 0000

Vertex Q(10,10)

L=0	Xmin=10	10>1
R=1	Xmax=10	10>7
B=0	Ymin=10	10>1
T=1	Ymax=10	10>7

Region code vertex Q = 0101

Karena region code vertex Q tidak bernilai 0000, maka kemungkinan garis PQ bersifat partially visible (garis yang hanya terlihat sebagian) dan perlu dipotong

> Titik potong pada garis PQ (1,1) (10,10)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{10 - 1}{10 - 1} = \frac{9}{9} = 1$$

Region code 0101 untuk vertex Q(10,10)

- Karena R=1, maka yang dicari adalah y_{p2}

$$y_{p2} = y_1 + m(x_{min} - x_1) = 1 + 1(1 - 1) = 0$$

Maka titik potongnya adalah $(x_{min}, y_{p1}) = (1,0)$

- Karena T=1, maka yang dicari adalah x_{p2}

$$x_{p2} = x_1 + \frac{y_{max} - y_1}{m} = 1 + \frac{7 - 1}{1} = 7$$

Maka titik potongnya adalah $(x_{p2}, y_{max}) = (7,7)$

Ada 2 titik potong pada garis Q yaitu (1,0) dan (7,7)

2. Diketahui P (1,1), Q(10,10)

Dan, $X_l = 1$, $X_r = 7$, $Y_b = 1$ dan $Y_t = 7$

$$dx = x_2 - x_1 = 10 - 1 = 9 \text{ (0000) (0101)}$$

$$P_1 = -dx = -9 \quad P_3 = -dy = -9$$

$$P_2 = dx = 9 \quad P_4 = dy = 9$$

$$dy = y_2 - y_1 = 10 - 1 = 9$$

$$\bullet Q_1 = x_1 - x_2 = 1 - 1 = 0 \quad \bullet Q_3 = y_1 - y_B = 1 - 1 = 0$$

$$\bullet Q_2 = X_R - X_1 = 7 - 1 = 6 \quad \bullet Q_4 = y_T - y_1 = 7 - 1 = 6$$

$$Q_1 / p_1 = 0 / -9 \quad Q_3 / p_3 = 0 / -9 = 0$$

$$Q_2 / p_2 = 6 / 9 = 2/3 \quad Q_4 / p_4 = 6 / 9 = 2/3$$

$$= (p_i < 0) \rightarrow T_1 = (0, 0, 0) = 0$$

$$= (p_i < 0) \rightarrow T_2 = (2/3, 2/3, 2/3) = 2/3$$

$$T_1 < T_2 \Rightarrow T_1 = 0$$

$$\bullet X_1 = x_1 + dx \times t_1 = 1 + 9 \times 0 = 1 + 0 = 1$$

$$\bullet Y_1 = y_1 + dy \times t_1 = 1 + 9 \times 0 = 1$$

$$(x_1, y_1) = (1, 1)$$

$$T_2 = 2/3$$

$$\bullet X_2 = x_1 + dx \times t_2 = 1 + 9 \times 2/3 = 1 + 6 = 7$$

$$\bullet Y_2 = y_1 + dy \times t_2 = 1 + 9 \times 2/3 = 7$$

$$\Rightarrow (x_2, y_2) = (7, 7)$$