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date:

1) Diket : Titik P = (1,1)
Titik Q = (10,10)
xmin = 1
xmax = 7
ymin = 1
ymax = 7

Selesaikan masalah dibawah dengan diPing Coren

Region Code PQ:

1) Garis PQ
Vertex P(1,1)
L = 0 → krn x = xmin yaitu 1=1
R = 0 → krn x < xmax yaitu 1<7
B = 0 → krn y = ymin yaitu 1=1
T = 0 → krn y < ymax yaitu 1<7
Jadi, Region code dari vertex adalah 0 000

Vertex Q(10,10)
L = 0 → krn x > xmin yaitu 10>1
R = 1 → krn x > xmax yaitu 10>7
B = 0 → krn y > ymin yaitu 10>1
T = 1 → krn y > ymax yaitu 10 10
Jadi Region Code dari vertex yaitu 10 10

Dengan xP_1, xP_2, yP_1, yP_2 dihitung persamaan

$$xP_1 = x_1 + \frac{y_{min} - y_1}{m}$$

$$yP_1 = y_1 + m(x_{min} - x_1)$$

•) garis Pa dengan Titik Potong (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 10 10 untuk verteks a (10.10)

$T=1 \rightarrow$ krn $T=1$ Jadi yg dicari xP_2

$$xP_2 = x_1 + \frac{y_{max} - y_1}{m}$$

$$= 10 + \frac{7-10}{1}$$

$$= 10 - 3 = 7$$

masa titik perasnya $(xP_2, y_{max}) \rightarrow (7,7)$

$R=1 \rightarrow$ krn $R=1$ maka yg dicari = yP_2

$yp_2 = y_1 + m \times (x_{max} - x_1)$

$10+1 \times (7-10)$

$10-3 = 7$

maka $(x_{max}, yp_2) \rightarrow (7, 7)$

2) Diket $p = (1,1)\ x_1 = 1 \quad y_b = 1$

$q = (10,10)\ x_t = 7 \quad y_t = 7$

Dit = algoritma ciang - Bursug

$dx = x_2 - x_1 \quad dy = y_2 - y_1 \rightarrow a_1/p_1 = \frac{9}{9}$

$= 10-1 \quad = 10-1$

$= 9 \quad = 9$

$p_1 = -dx \quad a_1 = x_1 - x_1$

$= -9 \quad = 1-1 = 0$

$p_2 = dx \quad a_2 = x_7 - x_1 \quad a_2/p_2 = \frac{6}{9}$

$= 9 \quad = 7-1 = 6$

$p_3 = -dy \quad d_3 = y_1 - y_6 \quad a_3/p_3 = \frac{0}{9}$

$= -9 \quad = 1-1 = 0 \quad = 0$

$p_4 = dy \quad a_4 = y_7 - y_1 \quad a_4/p_4 = \frac{6}{9}$

$= 9 \quad = 7-1 = 6 \quad = \frac{2}{3}$

date:

$t_1 < t_2$ dengan Perhitungan cara Pada Baru

$T_1 = 0$

$x_1 = x_1 + dx \times t_1$

$= 1 + (9 \times 0)$

$1 + 0 = 1$

$y_1 = y_1 + dy \times t_1$

$= 1 + (9 \times 0)$

$= 1 + 0 = 1$

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

$t_2 = 2/3$

$x_2 = x_1 + dx \times t_2$

$= 1 + (9 \times \frac{2}{3}$

$= 1 + 6 = 7$

$y_2 = x_1 + dy \times t_2$

$= 1 + (9 \cdot x \frac{2}{3}$

$= 1 + 6 = 7$

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