Example:-

1) Consider a line between (20,10) & (30,18). Draw using Bresenham's Algo.

$(x_0, y_0) = (20, 10)$ & $(x_1, y_1) = (30, 18)$

$$m = \frac{18-10}{30-20} = 0.8$$

$\Delta x = 30 - 20 = 10$

$\Delta y = 18 - 10 = 8$

$P_0 = 2\Delta y - \Delta x = 16 - 10 = 6$

$2\Delta y = 16$

$2\Delta y - 2\Delta x = -4$

K	P_K	(x_{K+1}, y_{K+1})	P_{K+1}
0	6	(21, 11)	$= 6 - 4 = 2$
1	2	(22, 12)	$= 2 - 4 = -2$
3	-2	(23, 12)	$= -2 + 16 = 14$
4	14	(24, 13)	$= 14 - 4 = 10$
5	10	(25, 14)	$= 10 - 4 = 6$
6	6	(26, 15)	$= 6 - 4 = 2$
7	2	(27, 16)	$= 2 - 4 = -2$
8	-2	(28, 16)	$= -2 + 16 = 14$
9	14	(29, 17)	$= 14 + 16 - 4 = 10$
10	10	(30, 18)	

2) Consider a line s/w (1,1) & (8,5). Draw using Bresenhami Algo.

$(x_0, y_0) = (1,1)$ & $(x_1, y_1) = (8,5)$

$\Delta x = 8 - 1 = 7$

$\Delta y = 5 - 1 = 4$

$P_0 = 2\Delta y - \Delta x$

$= 8 - 7$

$= 1$

$2\Delta y = 8$

$2\Delta y - 2\Delta x = 8 - 14 = -6$

K	P_K	(x_{K+1}, y_{K+1})	P_{K+1}
0	1	(2,2)	$= 1 - 6 = -5$
1	-5	(3,2)	$= -5 + 8 = 3$
2	3	(4,3)	$= 3 - 6 = -3$
3	-3	(5,3)	$= -3 + 8 = 5$
4	5	(6,4)	$= 5 - 6 = -1$
5	-1	(7,4)	$= -1 + 8 = 7$
6	7	(8,5)	