DOUG'S LINE DRAW 18/8/83

X, Y.

0,0

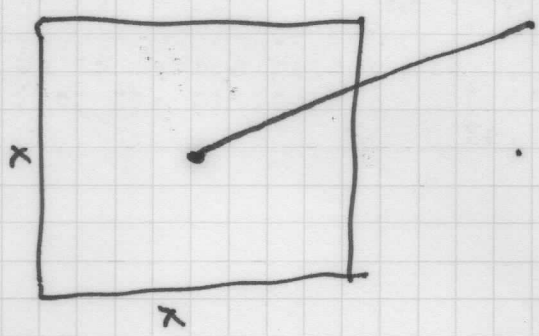
① IF X > Y, FINE. - OTHERWISE 'SWAP AXES' & 'SWAP DISPLACEMENTS'

PRETEND THAT PIXEL SIZE IS X × X - IN SOME METRIC

STARTING POINT OF LINE IS IN MIDDLE OF 1ST PIXEL, I.E. AT POSN

X/2, X/2 INSIDE PIXEL. (CALCULATE BY 16-bit SHIFT!)

ONLY KEEP TRACK OF CURRENT POSN W.R.T. CURRENT PIXEL.



1ST STEP: HORIZONTALLY BY X, VERTICALLY BY Y.

-I.E. NEW 'POSITION' IS X/2 + X - I.E. MIDDLE OF NEXT COLUMN.

X/2 + Y. - IS THIS > X?

IF SO, SWITCH ON NEXT HORIZ. PIXEL. (ACTUAL X+1,

IF SO, SWITCH ON NEXT DIAG. PIXEL. (ACTUAL X+1 / Y+1,)

(- AND SUBTRACT X WHICH IS RELEVANT BEING LOOPING I.E. FROM Y POSITION IF > X.)

CARRY ON UNTIL ACTUAL X = X.

ACTUAL Y MUST = Y IF MATHS RIGHT!