x1 x2 y1 y2

dx = abs(x2-x1)

dy = abs(y2-y1)

x1 <=x2

incx = 1

x1 = x2

incx = 0

x2 ≤ x1

incx = -1

y1 <=y2

incy = 1

y1 = y2

incy = 0

y2 < y1

incy = -1

x = x1

y = y1

slope <=1

slope > 1

dx < dy

Mark x,y

dp = 2 * dx - dy

dx <= dy

Mark x,y.

dp = 2 * dy - dx

<0

>=0

<0

>=0

dp += 2 * dx

y += incy

dp += 2 * (dx-dy)

x += incx

y += incy

dp += 2 * dy

x += incx

dp += 2 * (dy-dx)

y += incy

x += incx