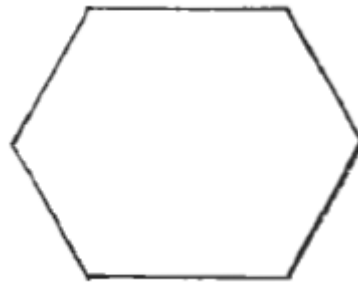
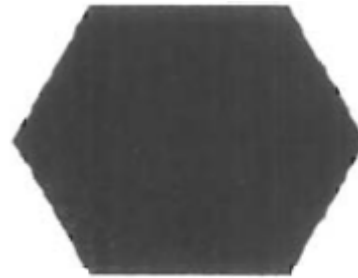


*Area fill attributes*

## FILL STYLES



Hollow



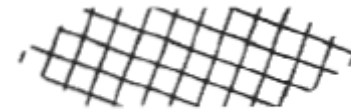
Solid



Patterned



Diagonal  
Hatch Fill



Diagonal  
Cross-Hatch Fill

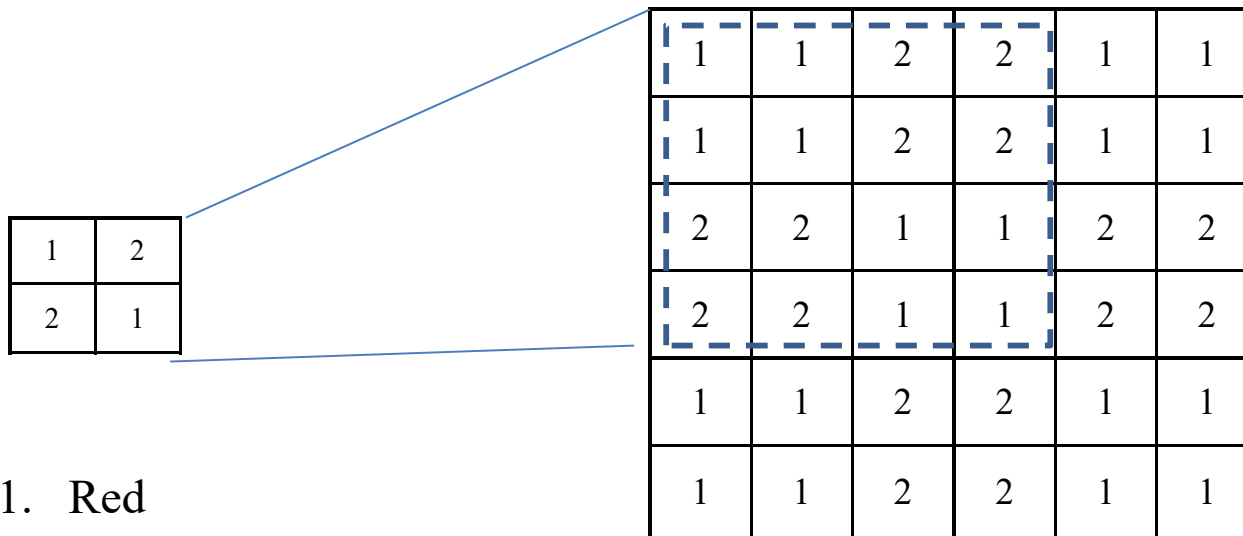
## Pattern Array

1	2
2	1

1. Red
2. Green

1	2	1	2	1	2
2	1	2	1	2	1
1	2	1	2	1	2
2	1	2	1	2	1
1	2	1	2	1	2
2	1	2	1	2	1

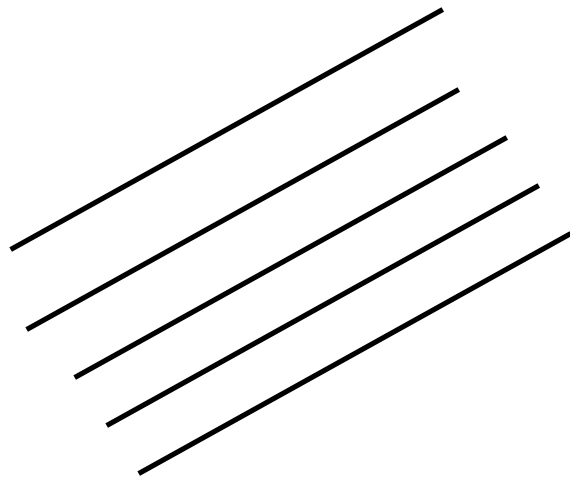
## Pattern Size



1. Red
2. Green

$dx=2$

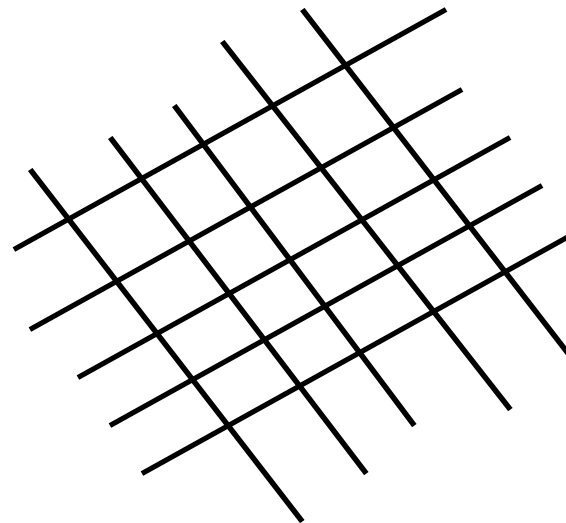
$dy=2$



Set of parallel lines

**Slope**

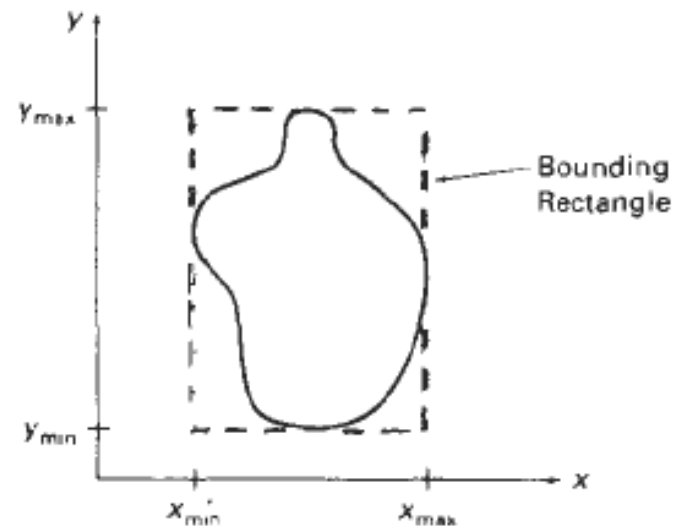
**Spacing**



Set of parallel lines crossing diagonally

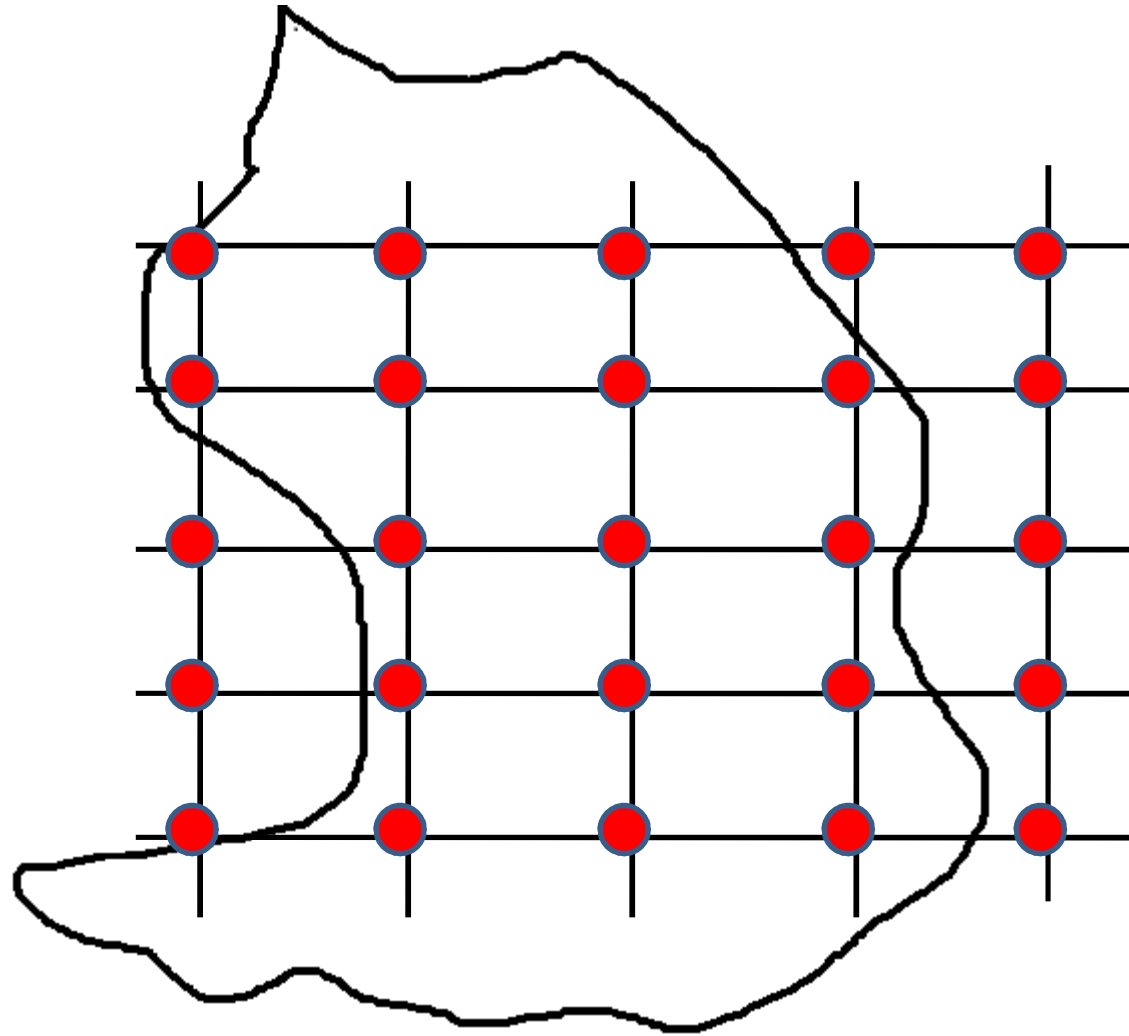
## Pattern reference point

A starting position from where a pattern is replicated in X and Y direction until defined area is covered by non overlapping copies of pattern array.

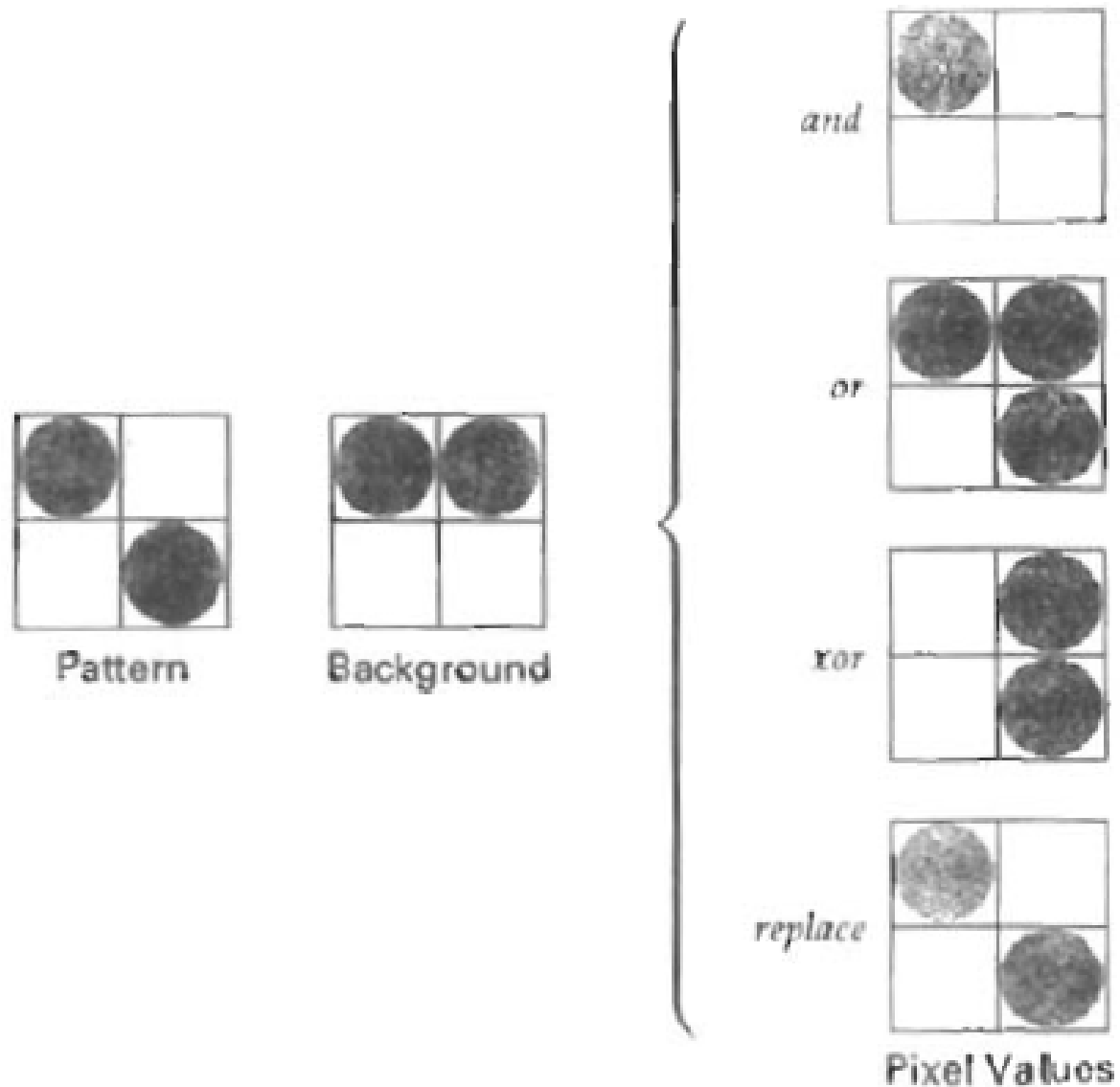


Bottom of the bounding box

# Implementation of patterned fill



# Pattern combined with background colour





# Soft fill

Fill colour is combined with background colour

## Linear Soft fill

$$P = tF + (1 - t)B \quad F \neq B$$

$$0 \leq t \leq 1$$

$$P \quad (P_R, P_G, P_B)$$

$$F \quad (F_R, F_G, F_B)$$

$$B \quad (B_R, B_G, B_B)$$

$$P_i = tF_i + (1 - t)B_i$$

$$t = \frac{(P_i - B_i)}{(F_i - B_i)}$$

Combining more than one background colour

$$P = tF + t_0B_1 + (1 - (t + t_0))B_2$$

$$F \neq B_1 \neq B_2$$

$$0 \leq t \leq 1,$$

$$0 \leq t_0 \leq 1$$

$$t + t_0 \leq 1$$