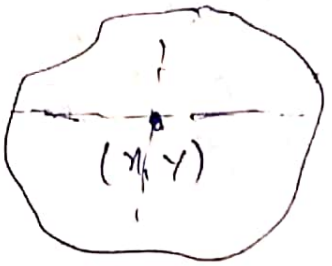
Boundary fill Algo. —

Interactive painting —

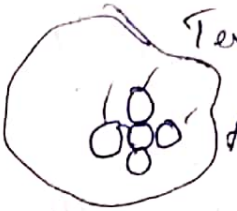
2 methods —

1. 4 Connected
2. 8 Connected



(1) Tested & filled until boundary reached

(2)



Boundary fill (x, y, fill, boundary)

Steps —

Initialize Boundary of the region & variable fill with colour

I - Get the interior pixel (x, y)
Now take an integer called current & assign it to (x, y)

Current = getpixel (x, y)

II If (Current <≠> boundary) and (Current ≠ fill) then

setpixel (x, y, fill)

boundaryfill 4 (x+1, y, fill, boundary)
——— (x-1, y, fill, boundary)
——— (x, y+1, ———)
——— (x, y-1, ———)

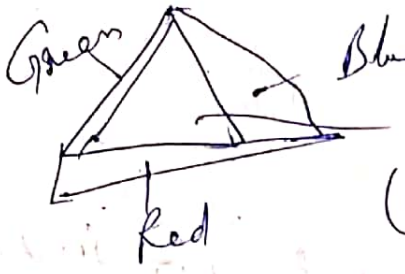
(Stack used)

IV End

Flood fill —

Area filling —

Search for boundary



region (old color)

fill color &

procedure floodfill 4(x, y, oldcolor, fillcolor, integer)

var current : Integer

current = getpixel (x, y)

if (current = oldcolor)

then

begin

setpixel (x, y, fillcolor)

floodfill(x, y+1, fillcolor, oldcolor)

floodfill(x, y-1, ____)

(x+1, y, ____)

(x-1, y, ____)

end —

point — 4 connected

Boundary diff.

(9)