**EXP NO 5 : BOUNDARY FILL**

#include <stdio.h>

#include <graphics.h>

#include<dos.h>

void boundaryfill(int x,int y,int f\_c,int b\_c)

{

if (getpixel(x,y)!=b\_c && getpixel(x,y)!=f\_c)

{

putpixel(x,y,f\_c);

boundaryfill(x+1,y,f\_c,b\_c);

boundaryfill(x,y+1,f\_c,b\_c);

boundaryfill(x-1,y,f\_c,b\_c);

boundaryfill(x,y-1,f\_c,b\_c);

}

}

int main()

{

int gm,gd=DETECT,radius,x,y;

// printf("Enter x and y co-ordinates for cicle : ");

//scanf("%d %d",&x,&y);

//printf("Enter radius of the circle : ");

// scanf("%d",&radius);

initgraph(&gd,&gm," ");

circle(x,y,radius);

rectangle(100,100,200,200);

printf("Enter the value of x and y : ");

scanf("%d %d",&x,&y);

boundaryfill(x,y,5,15);

delay(50000);

closegraph();

return 0;

}

**EXP NO 5 (2) : FLOOD FILL ALGO**

#include<stdio.h>

#include<graphics.h>

#include<dos.h>

void flood(int,int,int,int);

int main()

{

int gd,gm=DETECT;

//detectgraph(&gd,&gm);

initgraph(&gd,&gm," ");

rectangle(50,50,100,100);

flood(55,55,12,0);

closegraph();

return 0;

}

void flood(int x,int y, int fill\_col, int old\_col)

{

if(getpixel(x,y)==old\_col)

{

delay(10);

putpixel(x,y,fill\_col);

flood(x+1,y,fill\_col,old\_col);

flood(x-1,y,fill\_col,old\_col);

flood(x,y+1,fill\_col,old\_col);

flood(x,y-1,fill\_col,old\_col);

flood(x + 1, y + 1, fill\_col, old\_col);

flood(x - 1, y - 1, fill\_col, old\_col);

flood(x + 1, y - 1, fill\_col, old\_col);

flood(x - 1, y + 1, fill\_col, old\_col);

}

}