

Experiment No 5

Flood Fill

Source Code:

```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<dos.h>
void flood_fill(int,int,int,int);
void main()
{
int gd=DETECT,gm;
int x,y,r;
initgraph(&gd,&gm,"C:\\\\TurboC3\\\\BGI");
circle(75,100,30);
flood_fill(75,100,BLACK,RED);
getch();
}
void flood_fill(int x,int y,int ocolor,int ncolor)
{
if(getpixel(x,y)==ocolor) {
putpixel(x,y,ncolor);
flood_fill(x+1,y,ocolor,ncolor);
flood_fill(x,y+1,ocolor,ncolor);
flood_fill(x-1,y,ocolor,ncolor);
flood_fill(x,y-1,ocolor,ncolor);
} }
```

Output:



Boundary Fill

Source Code:

```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<dos.h>
void boundaryfill(int x,int y,int bcol,int fcol);
void main() {
int gd=DETECT,gm,x,y,r;
clrscr();
initgraph(&gd,&gm,"C:\\TurboC3\\BGI");
printf("\n the center points : \n");
scanf("%d%d",&x,&y);
printf("enter the radius\n");
scanf("%d",&r);
circle(x,y,r);
boundaryfill(x,y,WHITE,RED);
getch(); }
void boundaryfill(int x,int y,int bcol,int fcol) {
if ((getpixel(x,y)!=bcol)&&(getpixel(x,y)!=fcol)) {
    putpixel(x,y,RED);
    boundaryfill(x+1,y,bcol,fcol);
    boundaryfill(x,y+1,bcol,fcol);
    boundaryfill(x-1,y,bcol,fcol);
    boundaryfill(x,y-1,bcol,fcol);
    delay(100); } }
```

Output:

