

Experiment No 4

Source Code:

```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<dos.h>
void midpoint(int xc,int yc,int r);
void drawcircle(int xc,int yc,int y, int x);
void main(){
int gd=DETECT,gm,xc,yc,r;
initgraph(&gd,&gm,"C:\\\\TurboC3\\\\BGI");
printf("enter the values for xc,yc,r\\n");
scanf("%d%d%d",&xc,&yc,&r);
midpoint(xc,yc,r);
getch();}
void midpoint(int xc,int yc,int r){
int p,x=0,y=r;
p=3-2*r;
drawcircle(xc,yc,y,x);
while(x<=y)
{
x++;
if (p<0)
p=p+4*x+6;
else{
p=p+4*(x-y)+10;
y=y-1;}
drawcircle(xc,yc,x,y) ;
}}
void drawcircle(int xc,int yc, int y, int x)
{
putpixel(xc+x,yc+y,WHITE);
putpixel(xc+x,yc-y,WHITE);
putpixel(xc-x,yc+y,WHITE);
putpixel(xc-x,yc-y,WHITE);
putpixel(xc+y,yc+x,WHITE);
putpixel(xc-y,yc+x,WHITE);
putpixel(xc+y,yc-x,WHITE);
putpixel(xc-y,yc-x,WHITE);
delay(100);}
```

Output:



