```
#include<graphics.h>
#include<iostream>
#include<math.h>
using namespace std;
void circlebres (float x1, float y1,float r)
{
float x,y,p;
x = 0
y=r;
p=3-(2*r);// intial decision parameter
while(x<=y)
{
putpixel(x1+x,y1+y,WHITE); //draw pixel in each octant
putpixel(x1-x,y1+y,WHITE);
putpixel(x1+x,y1-y,WHITE);
putpixel(x1-x,y1-y, WHITE);
putpixel(x1+y,y1+x,WHITE);
putpixel(x1+y,y1-x, WHITE);
putpixel(x1-y,y1+x,WHITE);
putpixel (x1-y,y1-x,WHITE);
x = x + 1
if(p < 0)
{
p=p+4^ * (x) + 6 ;
}
else
{
p=p+4^ * (x - y) + 10
y = y - 1
}
delay(40);
}
}
void drawline(int x1,int y1, int x2,int y2)
{
int dx,dy,m,s;
float xi,yi,x,y;
dx=x2-x1;
dy=y2-y1;
if (abs(dx)>abs(dy))
{
s=abs(dx);
}
else
{
s=abs(dy);
}
```

```
xi=dx/(float) s;
yi=dy/(float) s;
x=x1;
y=y1;
putpixel(x1,y1, WHITE);
for(m=0;m<s;m++)
{
putpixel(x,y,WHITE);
x+=xi;
y+=yi;
};
delay(500);
}
int main()
{ int xc,yc,r;
cout<<"Enter Center Co-ordinates:";
cin>>xc>>yc;
cout<<"Enter RADIUS:";
cin>>r;
int gd=DETECT,gm=DETECT,x1,y1,x2,y2; initgraph(&gd, &gm, NULL);
circlebres (xc,yc,r); //inside circle double height, side;
//side=r/0.577
//height=1.73*side
side=1.73*side;
height=1.73*side;
drawline (xc-side,yc+r,xc+side, yc+r);//base line
delay(300);
drawline (xc-side,yc+r,xc,yc+r-height);//left line drawline (xc,yc+r-height,xc+side,yc+r);//right line
circlebres (xc,yc, height-r);//outer circle
delay(3000);
closegraph();
return 0;
}
```