Draw a circle using Midpoint Circle Algorithm

```
#include<dos.h>
#include<graphics.h>
#inc lude<iostream.h>
#include<math.h>
#include<conio.h>
void main()
{
 int gd=DETECT,gm;
 float d, x,y,h,k,r;
 initgraph(&gd,&gm,"c:\\BGI");
 outtextxy(150,10,"Midpoint Circle Algorithm     Www.Bcanotes.com");
 cout<<endl<<endl;
 cout<<"Enter coordinates of centre of circle";
 cin>>h>>k;
 cout<<"enter the radius of the circle";
 cin>>r;
 x=0;
 y=r;
 d=3-2*r;
 while(x<=y)
 {
 putpixel((x+h),(y+k),RED);
 putpixel((-x+h),(y+k),RED);
```

```
delay(100);
putpixel((-x+h),(-y+k),RED);
putpixel((x+h),(-y+k),RED);
putpixel((y+h),(x+k),RED);
delay(100);
putpixel((-y+h),(x+k),RED);
putpixel((-y+h),(-x+k),RED);
delay(100);
putpixel((y+h),(-x+k),RED);
if(d<=0)
{
d=d+2*x+3;
x=x+1;
}
else if(d>0)
{
d=d+2*(x-y)+5;
y=y-1;
x=x+1;
}
}
getch();
closegraph();
}
```