Bresenham’s Circle Drawing Algorithm

CODE:

#include<stdio.h>

#include<conio.h>

#include<graphics.h>

int x0,y0,x,y;

void pix()

{

putpixel(x0+x,y0+y,WHITE);

putpixel(x0+y,y0+x,WHITE);

putpixel(x0+x,y0-y,WHITE);

putpixel(x0+y,y0-x,WHITE);

putpixel(x0-x,y0-y,WHITE);

putpixel(x0-y,y0-x,WHITE);

putpixel(x0-x,y0+y,WHITE);

putpixel(x0-y,y0+x,WHITE);

}

void main()

{

int gd=DETECT,gm,p,r;

clrscr();

initgraph(&gd,&gm,"C:\\TC\\BGI");

printf("Enter the co-ordinates of centre and the radius of the circle");

scanf("%d %d %d",&x0,&y0,&r);

y=r;

p=3-2\*r;

for(x=0;x<=y;x++)

{

if(p<0)

{

p=p+4\*x+6;

}

else

{

y=y-1;

p=p+4\*(x-y)+10;

}

pix();

}

getch();

}

