Program – 5

Aim – To draw circle using mid-point Algorithm

#SOURCE CODE

#include<iostream.h>

#include<conio.h>

#include<graphics.h>

void main()

{ clrscr();

int gd=0,gm;

initgraph(&gd,&gm,"C:\\turboc3\\bgi");

float x,y,r,p0,x1,y1;

cout<<"\nPROGRAM FOR MAKING CIRCLE USING MID POINT ALGORITHIM\n";

cout<<"RAJAT [25-IT-19]\n\n";

cout<<"x = ";

cin>>x;

cout<<"y = ";

cin>>y;

cout<<"r = ";

cin>>r;

x1=0;

y1=r;

p0= 1-r;

while(x1<=y1)

{ putpixel(x+x1,y+y1,3);

putpixel(x+x1,y-y1,3);

putpixel(y+y1,x+x1,3);

putpixel(y+y1,x-x1,3);

putpixel(x-x1,y+y1,3);

putpixel(x-x1,y-y1,3);

putpixel(y-y1,x+x1,3);

putpixel(y-y1,x-x1,3);

if(p0<0)

{ p0=p0+2\*x1+1;

x1++;

}

else

{ p0=p0+2\*x1-2\*y1-1;

x1++;

y1--;

}

}

getch();

closegraph();

}