Assignment A2

Aim:- Write C++/Java program to draw circle using Bresenham‘s algorithm. Inherit pixel class.

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#include <iostream>

#include <graphics.h>

#include <math.h>

using namespace std;

class pixel

{

public:

int c1,c2,x,y,r;

void getdata()

{

cout<<"\nEnter co-ordinates of centre of circle :"<<endl;

cin>>c1>>c2;

cout<<"\nEnter Radius : ";

cin>>r;

}

};

class circle1:public pixel

{

public:

void draw()

{

int gd=DETECT,gm;

float pk;

initgraph(&gd,&gm,NULL);

x=0;

y=r;

pk=3-(2\*r);

do

{

putpixel(c1+x,c2+y,15);

putpixel(c1+y,c2+x,15);

putpixel(c1+y,c2-x,15);

putpixel(c1+x,c2-y,15);

putpixel(c1-x,c2-y,15);

putpixel(c1-y,c2-x,15);

putpixel(c1-y,c2+x,15);

putpixel(c1-x,c2+y,15);

if(pk<0)

{

pk=pk+(4\*x)+6;

}

else

{

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

y--;

}

x++;

}while(x<y);

getch();

closegraph();

}

};

int main()

{

circle1 obj;

obj.getdata();

obj.draw();

return 0;

}

**------------------------------------------------------------------------------------**

**OUTPUT :-**

Enter co-ordinates of centre of circle :

250

250

Enter Radius : 70

