#include<GL/glut.h>

#include<iostream>

using namespace std;

**int** r;

**void** E\_way(**int** x, **int** y){

glBegin(GL\_POINTS);

glVertex2i(x+320,y+240);

glVertex2i(y+320,x+240);

glVertex2i(y+320, -x+240);

glVertex2i(x+320, -y+240);

glVertex2i(-x+320,-y+240);

glVertex2i(-y+320,-x+240);

glVertex2i(-y+320,x+240);

glVertex2i(-x+320,y+240);

glEnd();

glFlush();

}

**void** B\_circle(){

**float** d;

d = 3 - 2\*r;

**int** x,y;

x = 0 ;

y = r ;

**do**{

E\_way(x,y);

**if**(d<0){

d=d+4\*x+6;

}

**else**{

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

y=y-1;

}

x=x+1;

}**while**(x<y);

}

**void** init(){

glClearColor(1,1,1,0);

glColor3f(1,0,0);

gluOrtho2D(0,640,0,480);

glClear(GL\_COLOR\_BUFFER\_BIT);

}

**int** main(**int** argc, **char** \*\*argv){

cout<<"\n Enter Radius \t ";

cin>>r;

glutInit(&argc, argv);

glutInitDisplayMode(GLUT\_SINGLE | GLUT\_RGB);

glutInitWindowPosition(100,100);

glutInitWindowSize(640,480);

glutCreateWindow("Circle");

init();

glutDisplayFunc(B\_circle);

glutMainLoop();

**return** 0;

}

