#include<GL/glut.h>

#include<stdio.h>

void display()

{

Glfloat vertices[3][2]={{0.0,0.0}, {25.0,50.0},{50.0, 0.0}};

int i,j,k;

int rand();

GLfloat p[2]={7.5, 5.0};

glClear(GL\_COLOR\_BUFFER\_BIT);

glBegin(GL\_POINTS);

for(k=0; k<5000; k++)

{

J=rand()%3;

P[0] =( P[0]+vertices[j][0])/2.0;

P[1]=(p[1]+vertices[j][1])/2.0;

glVertex2fv(p);

}

glEnd();

}

void myInit()

{

glMatrixMode(GL\_PROJECTION);

gluOrtho2D(0.0,50.0,0.0,50.0);

glLoadIdentity();

glMatrixMode(GL\_MODELVIEW);

}

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

{

glutInit(&argc,argv);

glutInitDisplayMode(GLUT\_RGB|GLUT\_SINGLE);

glutInitWindowSize(500,500);

glutInitWindowPosition(0,0);

glutCreateWindow("Sierpinski gasket");

myInit();

glutDisplayFunc(display);

glutMainLoop();

}