```
#include <GL/glut.h>
#include <math.h>

GLfloat oldx=-0.7,oldy=0.5;

void drawkoch(GLfloat dir,GLfloat len,GLint iter) {
	GLdouble dirRad = 0.0174533 * dir;
	GLfloat newX = oldx + len * cos(dirRad);
	GLfloat newY = oldy + len * sin(dirRad);
	if (iter==0) {
		glVertex2f(oldx, oldy);
		glVertex2f(newX, newY);
		oldx = newX;
		oldy = newY;
	}
	else {
		iter--;
		//draw the four parts of the side _/\_
		drawkoch(dir, len, iter);
		dir += 60.0;
		drawkoch(dir, len, iter);
		dir -= 120.0;
		drawkoch(dir, len, iter);
		dir += 60.0;
		drawkoch(dir, len, iter);
	}
}

void mydisplay(){
	 glClear( GL_COLOR_BUFFER_BIT );
	 glBegin(GL_LINES);
	 glColor3f(1.0, 0.0, 0.0); // make it red

	 //call drawkoch 3 times, one for each side of the triangle, changing direction each
time


	 drawkoch(0.0,0.015,4);
	 drawkoch(-120.0, 0.015, 4);
	 drawkoch(120.0,0.015,4);



	 glEnd();
	 glFlush();
}

int main(int argc, char** argv)
```

```
{
	glutInit(&argc,argv);
	glutInitDisplayMode(GLUT_SINGLE|GLUT_RGB);
	glutInitWindowSize(500,500);
	glutInitWindowPosition(0,0);
	glutCreateWindow("Koch Snowflake - Marcus Young");
	glutDisplayFunc(mydisplay);
	glutMainLoop();

	return 0;
}
```