```
#include <iostream>
#include <time.h>
#include <GL/glut.h>
using namespace std;
const GLsizei w = 800, h = 800;
void Display();
void Line(int x1, int y1, int x2, int y2, float red, float green, float blue);
void Fuga();
int main(int argc, char** argv) {
       glutInit(&argc, argv);
       glutInitDisplayMode(GLUT_RGB | GLUT_SINGLE);
       glutInitWindowPosition(600, 200);
       glutInitWindowSize(w, h);
       glutCreateWindow("COLORS");
       glutDisplayFunc(Display);
       gluOrtho2D(-(w / 2), w / 2, -(h / 2), h / 2);
       glutMainLoop();
       return 0;
void Line(int x1, int y1, int x2, int y2, float red, float green, float blue) {
       glLineWidth(8);
       glBegin(GL_LINES);
       glColor3f(red / 255, green / 255, blue / 255);
       glVertex2d(x1, y1);
       glVertex2d(x2, y2);
       glEnd();
       glFlush();
void Display() {
       Line(-(w / 2), 0, w / 2, 0, 255, 255, 255);
       Fuga();
void Fuga() {
       int red, green, blue;
       srand(time(NULL));
       for (int i = -600; i <= 600; i += 20) {
              red = rand() \% (256);
              green = rand() % (256);
              blue = rand() \% (256);
              Line(-(w / 2), 0, 0, i, red, green, blue);
              Line(0, i, w / 2, 0, red, green, blue);
       for (int i = -600; i <= 600; i += 20) {
              red = rand() % (256);
              green = rand() \% (256);
              blue = rand() \% (256);
              Line(0, -(h / 2), i, 0, red, green, blue);
              Line(i, 0, 0, h / 2, red, green, blue);
       }
}
```