#include <windows.h>

#include <GL/glut.h>

#include <stdio.h>

#include <math.h>

#include<iostream>

#include <time.h>

using namespace std;

void drawPoint(int x, int y)

{

glPointSize(7.0);

glColor3f(0.0f, 0.0f, 1.0f);

glBegin(GL\_POINTS);

glVertex2i(x, y);

glEnd();

}

float x[]={-250,0,250},y[]={-250,250,-250}, X[3],Y[3];;

float angle,theta;

void rotateCustom()

{

glClear(GL\_COLOR\_BUFFER\_BIT);

theta=angle\* 3.14 / 180;

int i=0;

for(i=0;i<3;i++){

X[i] = ((float)(x[i]) \* cos(theta))

- ((float)(y[i]) \* sin(theta));

Y[i] = ((float)(x[i]) \* sin(theta))

+ ((float)(y[i]) \* cos(theta));

}

glBegin(GL\_POLYGON);

for(i=0;i<3;i++){

glVertex2d(X[i],Y[i]);

}

glEnd();

glPointSize(3);

glColor3f(0,0,0);

glBegin(GL\_POINTS);

glVertex2d(0,0);

glEnd();

glFlush();

}

void init()

{

glClearColor(0.0,0.0,0.0,0.0);

glMatrixMode(GL\_PROJECTION);

glLoadIdentity();

gluOrtho2D(-500.0,500.0,-500.0,500.0);

}

void display()

{

glClear(GL\_COLOR\_BUFFER\_BIT);

glColor3f(1.0,1.0,1.0);

rotateCustom();

angle-=0.01;

}

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

{

glutInit(&argc,argv);

glutInitDisplayMode(GLUT\_SINGLE|GLUT\_RGB);

glutInitWindowSize(500,500);

glutInitWindowPosition(100,100);

glutCreateWindow("Rotation");

glutDisplayFunc(display);

glutIdleFunc(display);

init();

glutMainLoop();

}