

# Computer Graphics (CSD 304)

# Lab Task 28-9-2018

### Question:

Write an openGL code that displays a different points on screen randomly with random colors.

Solution:

#include <iostream> //

#include <stdio.h>

#include <math.h>

#include <windows.h>

#include <GL/glu.h>

#include <GL/gl.h>

#include <GL/glut.h>

void myinit() //set attributes

{

glClearColor(1.0f, 1.0f, 1.0f, 0.0f); // setting background color

glClear(GL\_COLOR\_BUFFER\_BIT); // Set world coordinates

glMatrixMode(GL\_PROJECTION);

glLoadIdentity();

gluOrtho2D(0, 100, 0, 100);

glMatrixMode(GL\_MODELVIEW);

}

void myIdle() {

// clear the background

glPointSize(10.0);

glBegin(GL\_POINTS);

glColor3f((float)((rand()%9))/8, (float)((rand() % 9)) / 8, (float)((rand() % 9)) / 8); // drawing color

glVertex2i(rand()%100, rand()%100);

glEnd();

glFlush();

}

void display()

{

glFlush();

}

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

glutInit(&argc, argv); // initialize GLUT

glutInitDisplayMode(GLUT\_SINGLE | GLUT\_RGB); //setting display mode

glutInitWindowSize(500, 500); // window size

glutInitWindowPosition(0, 0); // window position

glutCreateWindow("Random Points");

glutDisplayFunc(display); // Register callback func

glutIdleFunc(myIdle);

myinit(); // Set attributes

glutMainLoop(); // enter event Loop

return 0;

}

