

**Assignment Report of Computer Graphics Lab**

Course title: Computer Graphics Lab

Course code: CSE422

Submitted by,

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Submitted to,

[S](https://sites.google.com/view/syedatanjilaatik)yeda Tanjila Atik

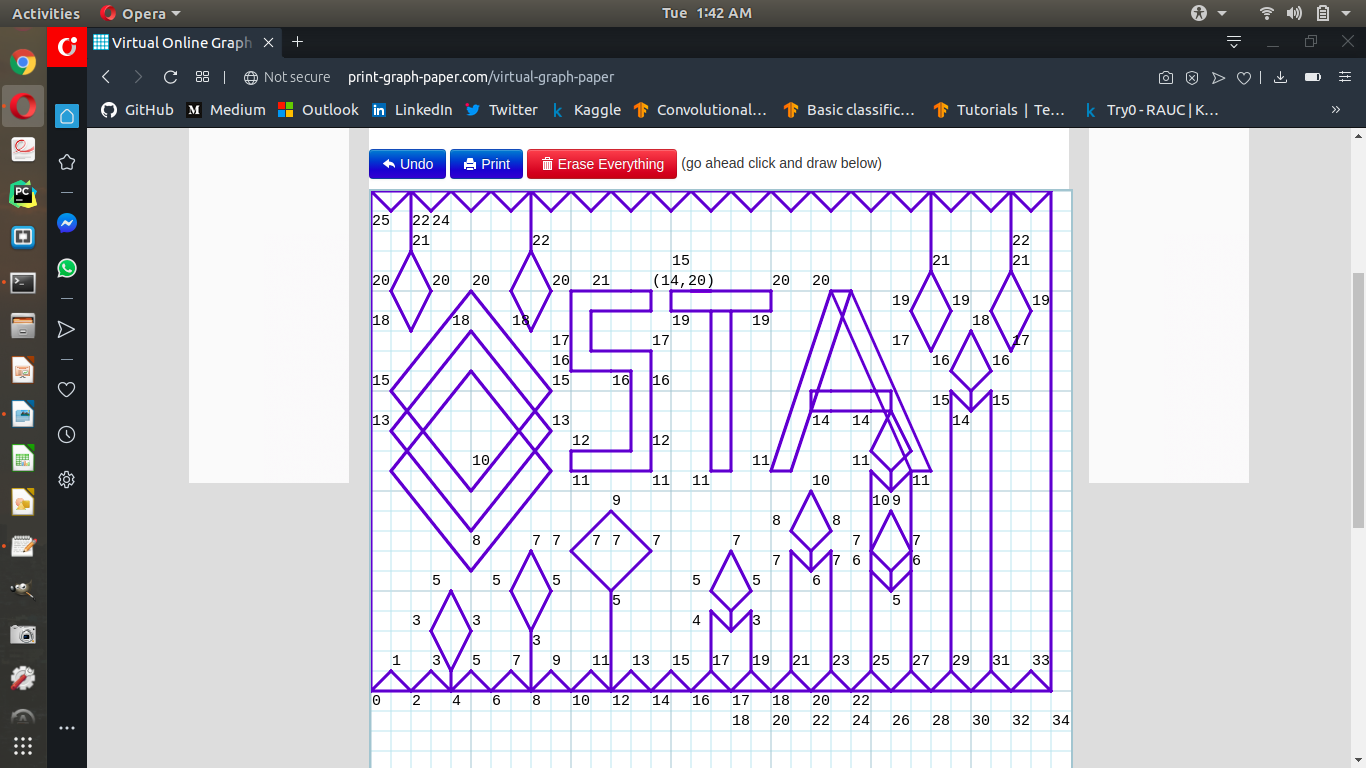
Lecturer

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**Graph**



After first try I adjust some points again, but can’t remove these from graph. I’m sorry for that.

**Code**

#include <GL/glut.h>

void init(void)

{

// Set display window colour to white

glClearColor(0.0, 0.0, 0.0, 0.0);

// Set projection parameters

glMatrixMode(GL\_PROJECTION);

gluOrtho2D(0.0, 34.0, 0.0, 25.0);

}

void rashidul(void)

{

// Clear display window

glClear(GL\_COLOR\_BUFFER\_BIT);

//main\_box

glColor3f(1.0, 1.0, 1.0);

glBegin(GL\_POLYGON);

glVertex2i(0, 25);

glVertex2i(34, 25);

glVertex2i(0, 25);

glVertex2i(0, 0);

glVertex2i(0, 0);

glVertex2i(34, 0);

glVertex2i(34, 0);

glVertex2i(34, 25);

glEnd();

//bottom

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(0, 0, 0);

glVertex3f(1, 1, 0);

glVertex3f(2, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(2, 0, 0);

glVertex3f(3, 1, 0);

glVertex3f(4, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(4, 0, 0);

glVertex3f(5, 1, 0);

glVertex3f(6, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(6, 0, 0);

glVertex3f(7, 1, 0);

glVertex3f(8, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(8, 0, 0);

glVertex3f(9, 1, 0);

glVertex3f(10, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(10, 0, 0);

glVertex3f(11, 1, 0);

glVertex3f(12, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(12, 0, 0);

glVertex3f(13, 1, 0);

glVertex3f(14, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(14, 0, 0);

glVertex3f(15, 1, 0);

glVertex3f(16, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(16, 0, 0);

glVertex3f(17, 1, 0);

glVertex3f(18, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(18, 0, 0);

glVertex3f(19, 1, 0);

glVertex3f(20, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(20, 0, 0);

glVertex3f(21, 1, 0);

glVertex3f(22, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(22, 0, 0);

glVertex3f(23, 1, 0);

glVertex3f(24, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(24, 0, 0);

glVertex3f(25, 1, 0);

glVertex3f(26, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(26, 0, 0);

glVertex3f(27, 1, 0);

glVertex3f(28, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(28, 0, 0);

glVertex3f(29, 1, 0);

glVertex3f(30, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(30, 0, 0);

glVertex3f(31, 1, 0);

glVertex3f(32, 0, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(32, 0, 0);

glVertex3f(33, 1, 0);

glVertex3f(34, 0, 0);

glEnd();

//upper

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(0, 25, 0);

glVertex3f(2, 25, 0);

glVertex3f(1, 24, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(2, 25, 0);

glVertex3f(3, 24, 0);

glVertex3f(4, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(4, 25, 0);

glVertex3f(5, 24, 0);

glVertex3f(6, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(6, 25, 0);

glVertex3f(7, 24, 0);

glVertex3f(8, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(8, 25, 0);

glVertex3f(9, 24, 0);

glVertex3f(10, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(10, 25, 0);

glVertex3f(11, 24, 0);

glVertex3f(12, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(12, 25, 0);

glVertex3f(13, 24, 0);

glVertex3f(14, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(14, 25, 0);

glVertex3f(15, 24, 0);

glVertex3f(16, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(16, 25, 0);

glVertex3f(17, 24, 0);

glVertex3f(18, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(18, 25, 0);

glVertex3f(19, 24, 0);

glVertex3f(20, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(20, 25, 0);

glVertex3f(21, 24, 0);

glVertex3f(22, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(22, 25, 0);

glVertex3f(23, 24, 0);

glVertex3f(24, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(24, 25, 0);

glVertex3f(25, 24, 0);

glVertex3f(26, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(26, 25, 0);

glVertex3f(27, 24, 0);

glVertex3f(28, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(28, 25, 0);

glVertex3f(29, 24, 0);

glVertex3f(30, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(30, 25, 0);

glVertex3f(31, 24, 0);

glVertex3f(32, 25, 0);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(32, 25, 0);

glVertex3f(33, 24, 0);

glVertex3f(34, 25, 0);

glEnd();

//upper\_end

glBegin(GL\_LINES);

glColor3f(1.0, 0.0, 0.0);

glVertex2i(8,0);

glVertex2i(8,3);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(7, 5, 0);

glVertex3f(8, 3, 0);

glVertex3f(9, 5, 0);

glVertex3f(8, 7, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(0.0, 0.5, 0.0);

glVertex2i(12,0);

glVertex2i(12,5);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(11, 7, 0);

glVertex3f(12, 5, 0);

glVertex3f(13, 7, 0);

glVertex3f(12, 9, 0);

glEnd();

//mombati 1

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(18, 0, 0);

glVertex3f(17, 1, 0);

glVertex3f(17, 4, 0);

glVertex3f(18, 3, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(18, 0, 0);

glVertex3f(18, 3, 0);

glVertex3f(19, 4, 0);

glVertex3f(19, 1, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(1.0, 0.0, 0.0);

glVertex2i(18,3);

glVertex2i(18,4);

glEnd();

glBegin(GL\_QUADS);

glColor3f(255.0, 215.0, 0.0);

glVertex3f(17, 5, 0);

glVertex3f(18, 7, 0);

glVertex3f(19, 5, 0);

glVertex3f(18, 4, 0);

glEnd();

//mombati 2

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(22, 0, 0);

glVertex3f(21, 1, 0);

glVertex3f(21, 7, 0);

glVertex3f(22, 6, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(22, 0, 0);

glVertex3f(22, 6, 0);

glVertex3f(23, 7, 0);

glVertex3f(23, 1, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(1.0, 0.0, 0.0);

glVertex2i(22,6);

glVertex2i(22,7);

glEnd();

glBegin(GL\_QUADS);

glColor3f(255.0, 215.0, 0.0);

glVertex3f(21, 8, 0);

glVertex3f(22, 10, 0);

glVertex3f(23, 8, 0);

glVertex3f(22, 7, 0);

glEnd();

//mombati 4

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(30, 0, 0);

glVertex3f(29, 1, 0);

glVertex3f(29, 15, 0);

glVertex3f(30, 14, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(30, 0, 0);

glVertex3f(30, 14, 0);

glVertex3f(31, 15, 0);

glVertex3f(31, 1, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(1.0, 0.0, 0.0);

glVertex2i(30,14);

glVertex2i(30,15);

glEnd();

glBegin(GL\_QUADS);

glColor3f(255.0, 215.0, 0.0);

glVertex3f(30, 15, 0);

glVertex3f(29, 16, 0);

glVertex3f(30, 18, 0);

glVertex3f(31, 16, 0);

glEnd();

//mombati end

glBegin(GL\_LINES);

glColor3f(0.0, 0.5, 0.0);

glVertex2i(4,0);

glVertex2i(4,1);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(4, 1, 0);

glVertex3f(3, 3, 0);

glVertex3f(4, 5, 0);

glVertex3f(5, 3, 0);

glEnd();

//s

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(10, 11, 0);

glVertex3f(14, 11, 0);

glVertex3f(14, 12, 0);

glVertex3f(10, 12, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(13, 12, 0);

glVertex3f(13, 16, 0);

glVertex3f(14, 16, 0);

glVertex3f(14, 12, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(10, 16, 0);

glVertex3f(10, 17, 0);

glVertex3f(14, 17, 0);

glVertex3f(14, 16, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(10, 17, 0);

glVertex3f(10, 20, 0);

glVertex3f(11, 20, 0);

glVertex3f(11, 17, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(11, 19, 0);

glVertex3f(11, 20, 0);

glVertex3f(14, 20, 0);

glVertex3f(14, 19, 0);

glEnd();

//t

glBegin(GL\_QUADS);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(17, 11, 0);

glVertex3f(17, 19, 0);

glVertex3f(18, 19, 0);

glVertex3f(18, 11, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(15, 19, 0);

glVertex3f(15, 20, 0);

glVertex3f(20, 20, 0);

glVertex3f(20, 19, 0);

glEnd();

//a

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(20, 11, 0);

glVertex3f(22, 20, 0);

glVertex3f(23, 20, 0);

glVertex3f(21, 11, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(25, 11, 0);

glVertex3f(22, 20, 0);

glVertex3f(23, 20, 0);

glVertex3f(26, 11, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(21, 14, 0);

glVertex3f(21, 15, 0);

glVertex3f(24, 15, 0);

glVertex3f(24, 14, 0);

glEnd();

//mombati 3

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(26, 0, 0);

glVertex3f(25, 1, 0);

glVertex3f(25, 6, 0);

glVertex3f(26, 5, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.1, 0.2, 0.3);

glVertex3f(26, 0, 0);

glVertex3f(26, 5, 0);

glVertex3f(27, 6, 0);

glVertex3f(27, 1, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(1.0, 0.0, 0.0);

glVertex2i(26,5);

glVertex2i(26,6);

glEnd();

glBegin(GL\_QUADS);

glColor3f(255.0, 215.0, 0.0);

glVertex3f(26, 6, 0);

glVertex3f(25, 7, 0);

glVertex3f(26, 9, 0);

glVertex3f(27, 7, 0);

glEnd();

//design

glBegin(GL\_QUADS);

glColor3f(255.0, 215.0, 0.0);

glVertex3f(1, 15, 0);

glVertex3f(5, 20, 0);

glVertex3f(9, 15, 0);

glVertex3f(5, 10, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(1, 13, 0);

glVertex3f(5, 18, 0);

glVertex3f(9, 13, 0);

glVertex3f(5, 8, 0);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(1, 11, 0);

glVertex3f(5, 16, 0);

glVertex3f(9, 11, 0);

glVertex3f(5, 6, 0);

glEnd();

//upper design

glBegin(GL\_LINES);

glColor3f(1.0, 0.0, 0.0);

glVertex2i(28,25);

glVertex2i(28,21);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(28, 17, 0);

glVertex3f(27, 19, 0);

glVertex3f(28, 21, 0);

glVertex3f(29, 19, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(0.0, 0.5, 0.0);

glVertex2i(2,25);

glVertex2i(2,21);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(2, 18, 0);

glVertex3f(1, 20, 0);

glVertex3f(2, 22, 0);

glVertex3f(3, 20, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(1.0, 0.0, 0.0);

glVertex2i(8,25);

glVertex2i(8,21);

glEnd();

glBegin(GL\_QUADS);

glColor3f(0.0, 0.5, 0.0);

glVertex3f(8, 18, 0);

glVertex3f(7, 20, 0);

glVertex3f(8, 22, 0);

glVertex3f(9, 20, 0);

glEnd();

glBegin(GL\_LINES);

glColor3f(0.0, 0.5, 0.0);

glVertex2i(32,25);

glVertex2i(32,21);

glEnd();

glBegin(GL\_QUADS);

glColor3f(1.0, 0.0, 0.0);

glVertex3f(32, 18, 0);

glVertex3f(31, 20, 0);

glVertex3f(32, 22, 0);

glVertex3f(33, 20, 0);

glEnd();

glFlush();

// Process all OpenGL routines

}

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

{

glutInit(&argc, argv);

glutInitDisplayMode(GLUT\_SINGLE|GLUT\_RGB);

glutInitWindowPosition(100, 100);

glutInitWindowSize(700, 600);

glutCreateWindow("171-15-8596");

init();

glutDisplayFunc(rashidul);

glutMainLoop();

return 0;

}

**Screenshot of the output**

