**Lab Taks-3**

Submission Guidelines-

* Rename the file to your id only. If your id is 18-XXXXX-1, then the file name must be 18-XXXXX-1.docx.
* Must submit within time that will be discussed in class VUES to the section named Lab Tak-3
* Must include resources for all the section in the table

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| **Question- 1**  Draw five storied building with windows and a front door |
| **Graph Plot (Picture)-** |
| **Code-**  #include <windows.h> #include <GL/glut.h> void building() {     glBegin(GL\_POLYGON);///rectangle     glColor3ub(133, 182, 202 );     glVertex2f(-400.0, 700.0);     glVertex2f(400.0, 700.0);     glVertex2f(400.0, -300.0);     glVertex2f(-400.0,-300.0);     glEnd();        glBegin(GL\_POLYGON);///rectangle     glColor3ub(115, 112, 108 );     glVertex2f(0.0, 800.0);     glVertex2f(400.0, 800.0);     glVertex2f(200.0, 1000.0);     glEnd();        glBegin(GL\_POLYGON);///rectangle     glColor3ub(52, 47, 46);     glVertex2f(400.0, 800.0);     glVertex2f(400.0, 700.0);     glVertex2f(0.0, 700.0);     glVertex2f(0.0,800.0);     glEnd();     glLineWidth(.1);     glBegin(GL\_LINES);///lines1     glColor3ub(0,0,0);     glVertex2f(-400.0, 700.0);     glVertex2f(400.0, 700.0);     glEnd();     glLineWidth(2.5);     glBegin(GL\_LINES);///lines2     glColor3ub(0,0,0);     glVertex2f(-400.0, 500.0);     glVertex2f(400.0, 500.0);     glEnd();     glLineWidth(2.5);     glBegin(GL\_LINES);///lines3     glColor3ub(0,0,0);     glVertex2f(-400.0, 300.0);     glVertex2f(400.0, 300.0);     glEnd();      glLineWidth(2.5);     glBegin(GL\_LINES);///lines4     glColor3ub(0,0,0);     glVertex2f(-400.0, 100.0);     glVertex2f(400.0, 100.0);     glEnd();     glLineWidth(2.5);     glBegin(GL\_LINES);///lines5     glColor3ub(0,0,0);     glVertex2f(-400.0, -100.0);     glVertex2f(400.0, -100.0);     glEnd();      glLineWidth(.1);     glBegin(GL\_LINES);///lines6     glColor3ub(0,0,0);     glVertex2f(-400.0, -300.0);     glVertex2f(400.0, -300.0);     glEnd();     glLineWidth(.1);     glBegin(GL\_LINES);///lines7     glColor3ub(0,0,0);     glVertex2f(400.0, 700.0);     glVertex2f(400.0, -300.0);     glEnd();     glLineWidth(.1);     glBegin(GL\_LINES);///lines8     glColor3ub(0,0,0);     glVertex2f(-400.0, 700.0);     glVertex2f(-400.0, -300.0);     glEnd();     ///window     glBegin(GL\_POLYGON);///rectangle1     glColor3ub(52, 47, 46);     glVertex2f(-240.0, 640.0);     glVertex2f(-160.0, 640.0);     glVertex2f(-160.0, 560.0);     glVertex2f(-240.0, 560.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle2     glColor3ub(52, 47, 46);     glVertex2f(-240.0, 440.0);     glVertex2f(-160.0, 440.0);     glVertex2f(-160.0, 360.0);     glVertex2f(-240.0, 360.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle3     glColor3ub(52, 47, 46);     glVertex2f(-240.0, 240.0);     glVertex2f(-160.0, 240.0);     glVertex2f(-160.0, 160.0);     glVertex2f(-240.0, 160.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle4     glColor3ub(52, 47, 46);     glVertex2f(-240.0, 40.0);     glVertex2f(-160.0, 40.0);     glVertex2f(-160.0, -40.0);     glVertex2f(-240.0, -40.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle5     glColor3ub(52, 47, 46);     glVertex2f(-240.0, -160.0);     glVertex2f(-160.0, -160.0);     glVertex2f(-160.0, -240.0);     glVertex2f(-240.0, -240.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle6     glColor3ub(52, 47, 46);     glVertex2f(160.0, 40.0);     glVertex2f(240.0, 40.0);     glVertex2f(240.0, -40.0);     glVertex2f(160.0, -40.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle7     glColor3ub(52, 47, 46);     glVertex2f(160.0, 240.0);     glVertex2f(240.0, 240.0);     glVertex2f(240.0, 160.0);     glVertex2f(160.0, 160.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle8     glColor3ub(52, 47, 46);     glVertex2f(160.0, -160.0);     glVertex2f(240.0, -160.0);     glVertex2f(240.0, -240.0);     glVertex2f(160.0, -240.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle9     glColor3ub(52, 47, 46);     glVertex2f(160.0, 440.0);     glVertex2f(240.0, 440.0);     glVertex2f(240.0, 360.0);     glVertex2f(160.0, 360.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle10     glColor3ub(52, 47, 46);     glVertex2f(160.0, 640.0);     glVertex2f(240.0, 640.0);     glVertex2f(240.0, 560.0);     glVertex2f(160.0, 560.0);     glEnd();     glBegin(GL\_POLYGON);///rectangle11     glColor3ub(52, 47, 46);     glVertex2f(-60.0, -152.0);     glVertex2f(60.0, -152.0);     glVertex2f(60.0, -300.0);     glVertex2f(-60.0, -300.0);     glEnd();     glLineWidth(.1);     glBegin(GL\_LINES);     glColor3ub(0,0,0);     glVertex2f(60.0, -300.0);     glVertex2f(-60.0, -300.0);     glEnd();     glLineWidth(.1);     glBegin(GL\_LINES);     glColor3ub(0,0,0);     glVertex2f(0.0,700.0);     glVertex2f(0.0,-100.0);     glEnd();     glLineWidth(.1);     glBegin(GL\_LINES);     glColor3ub(255,215,0);     glVertex2f(0.0,-152.0);     glVertex2f(0.0,-300.0);     glEnd(); } void display() {     glClearColor(1.0, 1.0, 1.0, 1.0);     glClear(GL\_COLOR\_BUFFER\_BIT);     building();        glFlush(); } int main(int argc, char\*\* argv) {     glutInit(&argc, argv);     glutCreateWindow("OpenGL Setup");     glutInitWindowSize(840, 580);     glutInitWindowPosition(80, 80);     glutDisplayFunc(display);     gluOrtho2D(-1000,1000, -1000, 1000);     glutMainLoop();     return 0; } |
| **Output Screenshot (Full Screen)-** |

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| **Question- 2**  Draw a tree |
| **Graph Plot (Picture)-** |
| **Code-**  **#include <windows.h>**  **#include <GL/glut.h>**  **void polygon1() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(132, 72, 12);**  **glVertex2f(4,0);**  **glVertex2f(6,0);**  **glVertex2f(6,12);**  **glVertex2f(4,12);**  **glEnd();**  **}**  **void polygon2() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(34,139,34);**  **glVertex2f(0,12);**  **glVertex2f(4,12);**  **glVertex2f(6,12);**  **glVertex2f(9.5,12);**  **glVertex2f(8,14);**  **glVertex2f(2,14);**  **glVertex2f(0,12);**  **glEnd();**  **}**  **void polygon3() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(34,139,34);**  **glVertex2f(0,14);**  **glVertex2f(2,14);**  **glVertex2f(8,14);**  **glVertex2f(9.5,14);**  **glVertex2f(8,16);**  **glVertex2f(2,16);**  **glVertex2f(0,14);**  **glEnd();**  **}**  **void polygon4() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(34,139,34);**  **glVertex2f(0,16);**  **glVertex2f(5,22);**  **glVertex2f(10,16);**  **glEnd();**  **}**  **void display() {**  **glClearColor(1.0f, 1.0f, 1.0f, 1.0f);**  **glClear(GL\_COLOR\_BUFFER\_BIT);**  **polygon1();**  **polygon2();**  **polygon3();**  **polygon4();**  **glFlush();**  **}**  **int main(int argc, char\*\* argv)**  **{**  **glutInit(&argc, argv);**  **glutCreateWindow("OpenGL Setup Test");**  **glutInitWindowSize(320,320);**  **glutDisplayFunc(display);**  **gluOrtho2D(-30,30,-30,30);**  **glutMainLoop();**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-** |

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| **Question- 3**  Draw a lamppost with black background |
| **Graph Plot (Picture)-**  **A graph with a diagram  Description automatically generated with medium confidence** |
| **C**  **#include <windows.h>**  **#include <GL/glut.h>**  **void polygon1() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(5, 44, 100);**  **glVertex2f(-8,0);**  **glVertex2f(-4,0);**  **glVertex2f(-4.8380622465738, 1.0530315058738);**  **glVertex2f(-7.2178,1.0332248);**  **glVertex2f(-8,0);**  **glEnd();**  **}**  **void polygon2() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(5, 44, 100);**  **glVertex2f(-6.485065,1.038);**  **glVertex2f(-5.5122136373396, 1.0398117745743);**  **glVertex2f(-5.4931771338471, 15.9153439621579);**  **glVertex2f(-6.5151923000572, 15.9153439621579);**  **glVertex2f(-6.485065,1.038);**  **glEnd();**  **}**  **void polygon3() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(238, 241, 42);**  **glVertex2f(-7,16);**  **glVertex2f(-5,16);**  **glVertex2f(-4.2887237870516, 18.6872076962883);**  **glVertex2f(-7.5831157407677, 18.7252931524006);**  **glVertex2f(-7,16);**  **glEnd();**  **}**  **void polygon4() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(5, 44, 100);**  **glVertex2f(-6,20);**  **glVertex2f(-7.5831157407677, 18.7252931524006);**  **glVertex2f(-4.2887237870516, 18.6872076962883);**  **glVertex2f(-6,20);**  **glEnd();**  **}**  **void display() {**  **glClearColor(0, 0, 0,0 );**  **glClear(GL\_COLOR\_BUFFER\_BIT);**  **polygon1();**  **polygon2();**  **polygon3();**  **polygon4();**  **glFlush();**  **}**  **int main(int argc, char\*\* argv)**  **{**  **glutInit(&argc, argv);**  **glutCreateWindow("OpenGL Setup Test");**  **glutInitWindowSize(320,320);**  **glutDisplayFunc(display);**  **gluOrtho2D(-30,30,-30,30);**  **glutMainLoop();**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-**  **A screenshot of a computer  Description automatically generated** |

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| **Question- 4**  Draw a bench |
| **Graph Plot (Picture)-** |
| **Code-**  **#include<Gl/gl.h>**  **#include<Gl/glu.h>**  **#include<Gl/glut.h>**  **#include<math.h>**  **void display();**  **void reshape(int,int);**  **void init()**  **{**  **glClearColor(255,255,255,1.0);**  **}**  **int main(int argc,char \*\*argv)**  **{**  **glutInit(&argc,argv);**  **glutInitDisplayMode(GLUT\_RGB);**  **glutInitWindowPosition(200,100);**  **glutInitWindowSize(500,500);**  **glutCreateWindow("Bench");**  **glutDisplayFunc(display);**  **glutReshapeFunc(reshape);**  **init();**  **glutMainLoop();**  **}**  **void display()**  **{**  **glClear(GL\_COLOR\_BUFFER\_BIT);**  **glLoadIdentity();**  **//Box-1**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(11.25,-11);**  **glVertex2f(4.75,-11);**  **glVertex2f(4.75,-15);**  **glVertex2f(11.25,-15);**  **glEnd();**  **//Box-2**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(7,-15);**  **glVertex2f(6.5,-15);**  **glVertex2f(6.5,-15.5);**  **glVertex2f(7,-15.5);**  **glEnd();**  **//Box-3**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(9.5,-15);**  **glVertex2f(9,-15);**  **glVertex2f(9,-15.5);**  **glVertex2f(9.5,-15.5);**  **glEnd();**  **//Box-4**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(11.65,-15.5);**  **glVertex2f(4.5,-15.5);**  **glVertex2f(4,-18.5);**  **glVertex2f(12.2,-18.5);**  **glEnd();**  **//Box-5**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(11.5,-18.5);**  **glVertex2f(11,-18.5);**  **glVertex2f(11,-20.5);**  **glVertex2f(11.5,-20.5);**  **glEnd();**  **//Box-6**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(5,-18.5);**  **glVertex2f(5.5,-18.5);**  **glVertex2f(5.5,-20.5);**  **glVertex2f(5,-20.5);**  **glEnd();**  **//Box-7**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(7,-18.5);**  **glVertex2f(6.5,-18.5);**  **glVertex2f(6.5,-20);**  **glVertex2f(7,-20);**  **glEnd();**  **//Box-8**  **glBegin(GL\_POLYGON);**  **glColor3ub(0,0,0);// Dark Red color**  **glVertex2f(9.5,-18.5);**  **glVertex2f(9,-18.5);**  **glVertex2f(9,-20);**  **glVertex2f(9.5,-20);**  **glEnd();**  **glFlush();**  **}**  **void reshape(int w,int h)**  **{**  **glViewport(0,0,(GLsizei)w,(GLsizei)h);**  **glMatrixMode(GL\_PROJECTION);**  **glLoadIdentity();**  **gluOrtho2D(-5,20,-50,30);**  **glMatrixMode(GL\_MODELVIEW);**  **}** |
| **Output Screenshot (Full Screen)-** |

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| **Question- 5**  Use the building, tree, lamppost and bench to create a scenario |
| **Graph Plot (Picture)-** |
| **Code-**  **#include<Gl/gl.h>**  **#include<Gl/glu.h>**  **#include<Gl/glut.h>**  **#include<math.h>**  **void display();**  **void lamppost()**  **{**  **glBegin(GL\_POLYGON);**  **glColor3ub(5, 44, 100);**  **glVertex2f(-85,0);**  **glVertex2f(-75,0);**  **glVertex2f(-77,4);**  **glVertex2f(-83,4);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(5, 44, 100);**  **glVertex2f(-82,4);**  **glVertex2f(-78,4);**  **glVertex2f(-78,50);**  **glVertex2f(-82,50);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(238, 241, 42);**  **glVertex2f(-84,50);**  **glVertex2f(-76,50);**  **glVertex2f(-75,60);**  **glVertex2f(-85,60);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(5, 44, 100);**  **glVertex2f(-85,60);**  **glVertex2f(-75,60);**  **glVertex2f(-80,70);**  **glEnd();**  **}**  **void building() {**  **glBegin(GL\_POLYGON);**  **glColor3ub(133, 182, 202 );**  **glVertex2f(-10.0, 100.0);**  **glVertex2f(70.0, 100);**  **glVertex2f(70.0, 0.0);**  **glVertex2f(-10.0,0.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle**  **glColor3ub(115, 112, 108 );**  **glVertex2f(-10.0, 100.0);**  **glVertex2f(30.0, 130.0);**  **glVertex2f(70.0, 100.0);**  **glEnd();**  **glLineWidth(2.5);**  **glBegin(GL\_LINES);///lines2**  **glColor3ub(0,0,0);**  **glVertex2f(-10.0, 80.0);**  **glVertex2f(70.0, 80.0);**  **glEnd();**  **glLineWidth(2.5);**  **glBegin(GL\_LINES);///lines3**  **glColor3ub(0,0,0);**  **glVertex2f(-10.0, 60.0);**  **glVertex2f(70.0, 60.0);**  **glEnd();**  **glLineWidth(2.5);**  **glBegin(GL\_LINES);///lines4**  **glColor3ub(0,0,0);**  **glVertex2f(-10.0, 40.0);**  **glVertex2f(70.0, 40.0);**  **glEnd();**  **glLineWidth(2.5);**  **glBegin(GL\_LINES);///lines5**  **glColor3ub(0,0,0);**  **glVertex2f(-10.0, 20.0);**  **glVertex2f(70.0, 20.0);**  **glEnd();**  **glLineWidth(.1);**  **glBegin(GL\_LINES);///lines6**  **glColor3ub(0,0,0);**  **glVertex2f(-10.0, 0.0);**  **glVertex2f(70.0, 0.0);**  **glEnd();**  **glLineWidth(.1);**  **glBegin(GL\_LINES);///lines7**  **glColor3ub(0,0,0);**  **glVertex2f(70.0, 100.0);**  **glVertex2f(70.0, 0.0);**  **glEnd();**  **glLineWidth(.1);**  **glBegin(GL\_LINES);///lines8**  **glColor3ub(0,0,0);**  **glVertex2f(-10.0, 100.0);**  **glVertex2f(-10.0, 0.0);**  **glEnd();**  **///window**  **glBegin(GL\_POLYGON);///rectangle1**  **glColor3ub(52, 47, 46 );**  **glVertex2f(6.0, 94.0);**  **glVertex2f(14.0, 94.0);**  **glVertex2f(14.0, 86.0);**  **glVertex2f(6.0, 86.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle2**  **glColor3ub(52, 47, 46 );**  **glVertex2f(6.0, 74.0);**  **glVertex2f(14.0, 74.0);**  **glVertex2f(14.0, 66.0);**  **glVertex2f(6.0, 66.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle3**  **glColor3ub(52, 47, 46 );**  **glVertex2f(6.0, 54.0);**  **glVertex2f(14.0, 54.0);**  **glVertex2f(14.0, 46.0);**  **glVertex2f(6.0, 46.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle4**  **glColor3ub(52, 47, 46 );**  **glVertex2f(6.0, 34.0);**  **glVertex2f(14.0, 34.0);**  **glVertex2f(14.0, 26.0);**  **glVertex2f(6.0, 26.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle5**  **glColor3ub(52, 47, 46 );**  **glVertex2f(6.0, 14.0);**  **glVertex2f(14.0, 14.0);**  **glVertex2f(14.0, 6.0);**  **glVertex2f(6.0, 6.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle6**  **glColor3ub(52, 47, 46 );**  **glVertex2f(46.0, 34.0);**  **glVertex2f(54.0, 34.0);**  **glVertex2f(54.0, 26.0);**  **glVertex2f(46.0, 26.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle7**  **glColor3ub(52, 47, 46 );**  **glVertex2f(46.0, 54.0);**  **glVertex2f(54.0, 54.0);**  **glVertex2f(54.0, 46.0);**  **glVertex2f(46.0, 46.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle8**  **glColor3ub(52, 47, 46 );**  **glVertex2f(46.0, 14.0);**  **glVertex2f(54.0, 14.0);**  **glVertex2f(54.0, 6.0);**  **glVertex2f(46.0, 6.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle9**  **glColor3ub(52, 47, 46 );**  **glVertex2f(46.0, 74.0);**  **glVertex2f(54.0, 74.0);**  **glVertex2f(54.0, 66.0);**  **glVertex2f(46.0, 66.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle10**  **glColor3ub(52, 47, 46 );**  **glVertex2f(46.0, 94.0);**  **glVertex2f(54.0, 94.0);**  **glVertex2f(54.0, 86.0);**  **glVertex2f(46.0, 86.0);**  **glEnd();**  **glBegin(GL\_POLYGON);///rectangle11**  **glColor3ub(52, 47, 46);**  **glVertex2f(24.0, 15.2);**  **glVertex2f(36.0, 15.2);**  **glVertex2f(36.0, 0.0);**  **glVertex2f(24.0, 0.0);**  **glEnd();**  **glLineWidth(.1);**  **glBegin(GL\_LINES);**  **glColor3ub(0,0,0);**  **glVertex2f(36.0, 0.0);**  **glVertex2f(24.0, 0.0);**  **glEnd();**  **glLineWidth(.1);**  **glBegin(GL\_LINES);**  **glColor3ub(0,0,0);**  **glVertex2f(30.0,100.0);**  **glVertex2f(30.0,20.0);**  **glEnd();**  **glLineWidth(.1);**  **glBegin(GL\_LINES);**  **glColor3ub(255,215,0);**  **glVertex2f(30.0,15.2);**  **glVertex2f(30.0,0.0);**  **glEnd();**  **}**  **void tree()**  **{**  **glBegin(GL\_POLYGON);**  **glColor3ub(132, 72, 12);**  **glVertex2f(-20,0);**  **glVertex2f(-15,0);**  **glVertex2f(-15,50);**  **glVertex2f(-20,50);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(34,139,34);**  **glVertex2f(-30,50);**  **glVertex2f(-5,50);**  **glVertex2f(-10,60);**  **glVertex2f(-25,60);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(34,139,34);**  **glVertex2f(-5,60);**  **glVertex2f(-30,60);**  **glVertex2f(-25,70);**  **glVertex2f(-10,70);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(34,139,34);**  **glVertex2f(-5,70);**  **glVertex2f(-30,70);**  **glVertex2f(-18,100);**  **glEnd();**  **}**  **void bench()**  **{**  **//Box-1**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-60,15);**  **glVertex2f(-35,15);**  **glVertex2f(-35,10);**  **glVertex2f(-60,10);**  **glEnd();**  **//Box-2**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-54,10);**  **glVertex2f(-53,10);**  **glVertex2f(-53,8);**  **glVertex2f(-54,8);**  **glEnd();**  **//Box-3**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-42,10);**  **glVertex2f(-43,10);**  **glVertex2f(-43,8);**  **glVertex2f(-42,8);**  **glEnd();**  **//Box-4**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-62,8);**  **glVertex2f(-34,8);**  **glVertex2f(-32,4);**  **glVertex2f(-64,4);**  **glEnd();**  **//Box-5**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-63,1);**  **glVertex2f(-62,1);**  **glVertex2f(-62,4);**  **glVertex2f(-63,4);**  **glEnd();**  **//Box-6**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-54,2);**  **glVertex2f(-53,2);**  **glVertex2f(-52,4);**  **glVertex2f(-54,4);**  **glEnd();**  **//Box-7**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-42,2);**  **glVertex2f(-43,2);**  **glVertex2f(-43,4);**  **glVertex2f(-42,4);**  **glEnd();**  **//Box-8**  **glBegin(GL\_POLYGON);**  **glColor3ub(1,1,1);//**  **glVertex2f(-34,1);**  **glVertex2f(-33,1);**  **glVertex2f(-33,4);**  **glVertex2f(-34,4);**  **glEnd();**  **}**  **void display() {**  **glClearColor(1.0, 1.0, 1.0, 1.0);**  **glClear(GL\_COLOR\_BUFFER\_BIT);**  **building();**  **lamppost();**  **bench();**  **tree();**  **glFlush();**  **}**  **int main(int argc, char\*\* argv) {**  **glutInit(&argc, argv);**  **glutCreateWindow("OpenGL Setup");**  **glutInitWindowSize(840, 580);**  **glutInitWindowPosition(80, 80);**  **glutDisplayFunc(display);**  **gluOrtho2D(-100,100, -100, 200);**  **glutMainLoop();**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-**  **A computer screen shot of a building and a tree  Description automatically generated** |