**Lab Taks-2**

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| **Question- 1**  Draw a Rainbow Flag |
| **Graph Plot (Picture)-** |
| **Code-**  **#include <windows.h>**  **#include <GL/glut.h>**  **void initGL() {**  **glClearColor(0.0f, 0.0f, 0.0f, 1.0f); //Black and opaque**  **}**  **void display() {**  **glClear(GL\_COLOR\_BUFFER\_BIT); // Clear the color buffer with current clearing color**  **glBegin(GL\_POLYGON);**  **glColor3f(1.0f, 0.0f, 0.0f); //red**  **glVertex2f(-0.5f, 0.4f);**  **glVertex2f(-0.5f, 0.35f);**  **glVertex2f(0.5f, 0.35f);**  **glVertex2f(0.5f, 0.4f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(1.0f, 0.5f, 0.0f); //orange**  **glVertex2f(-0.5f, 0.35f);**  **glVertex2f(-0.5f, 0.3f);**  **glVertex2f(0.5f, 0.3f);**  **glVertex2f(0.5f, 0.35f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(1.0f, 1.0f, 0.0f);//Yellow**  **glVertex2f(-0.5f, 0.3f);**  **glVertex2f(-0.5f, 0.25f);**  **glVertex2f(0.5f, 0.25f);**  **glVertex2f(0.5f, 0.3f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 1.0f, 0.0f); //green**  **glVertex2f(-0.5f, 0.25f);**  **glVertex2f(-0.5f, 0.2f);**  **glVertex2f(0.5f, 0.2f);**  **glVertex2f(0.5f, 0.25f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 1.0f); //blue**  **glVertex2f(-0.5f, 0.2f);**  **glVertex2f(-0.5f, 0.15f);**  **glVertex2f(0.5f, 0.15f);**  **glVertex2f(0.5f, 0.2f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(93, 111, 211); //indigo**  **glVertex2f(-0.5f, 0.15f);**  **glVertex2f(-0.5f, 0.1f);**  **glVertex2f(0.5f, 0.1f);**  **glVertex2f(0.5f, 0.15f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(238,130,238); //purple**  **glVertex2f(-0.5f, 0.1f);**  **glVertex2f(-0.5f, 0.05f);**  **glVertex2f(0.5f, 0.05f);**  **glVertex2f(0.5f, 0.1f);**  **glEnd();**  **glFlush(); //Render now**  **}**  **int main(int argc, char\*\* argv) {**  **glutInit(&argc, argv); // Initialize GLUT**  **glutCreateWindow("Vertex, Primitive & Color"); // Create window with the given title**  **glutInitWindowSize(320, 320); // Set the window's initial width & height**  **glutInitWindowPosition(50, 50); // Position the window's initial top-left corner**  **glutDisplayFunc(display); // Register callback handler for window re-paint event**  **initGL(); // Our own OpenGL initialization**  **glutMainLoop(); // Enter the event-processing loop**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-** |

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| **Question- 2**  Draw 8X8 Chess Board |
| **Graph Plot (Picture)-** |
| **Code-**  **#include <windows.h> // for MS Windows**  **#include <GL/glut.h> // GLUT, include glu.h and gl.h**  **/\* Handler for window-repaint event. Call back when the window first appears and**  **whenever the window needs to be re-painted. \*/**  **void display() {**  **glClearColor(0.0f, 1.0f, 1.0f, 1.0f); // Set background color to white and opaque**  **glClear(GL\_COLOR\_BUFFER\_BIT); // Clear the color buffer (background)**  **glLineWidth(.5);**  **//(-x,y)**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.0f, 0.0f);**  **glVertex2f(-0.1f, 0.0f);**  **glVertex2f(-0.1f, 0.1f);**  **glVertex2f(-0.0f, 0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.1f, 0.0f);**  **glVertex2f(-0.2f, 0.0f);**  **glVertex2f(-0.2f, 0.1f);**  **glVertex2f(-0.1f, 0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.2f, 0.0f);**  **glVertex2f(-0.3f, 0.0f);**  **glVertex2f(-0.3f, 0.1f);**  **glVertex2f(-0.2f, 0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.3f, 0.0f);**  **glVertex2f(-0.4f, 0.0f);**  **glVertex2f(-0.4f, 0.1f);**  **glVertex2f(-0.3f, 0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.0f, 0.1f);**  **glVertex2f(-0.1f, 0.1f);**  **glVertex2f(-0.1f, 0.2f);**  **glVertex2f(-0.0f, 0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.1f, 0.1f);**  **glVertex2f(-0.2f, 0.1f);**  **glVertex2f(-0.2f, 0.2f);**  **glVertex2f(-0.1f, 0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.2f, 0.1f);**  **glVertex2f(-0.3f, 0.1f);**  **glVertex2f(-0.3f, 0.2f);**  **glVertex2f(-0.2f, 0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.3f, 0.1f);**  **glVertex2f(-0.4f, 0.1f);**  **glVertex2f(-0.4f, 0.2f);**  **glVertex2f(-0.3f, 0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.0f, 0.2f);**  **glVertex2f(-0.1f, 0.2f);**  **glVertex2f(-0.1f, 0.3f);**  **glVertex2f(-0.0f, 0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.1f, 0.2f);**  **glVertex2f(-0.2f, 0.2f);**  **glVertex2f(-0.2f, 0.3f);**  **glVertex2f(-0.1f, 0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.2f, 0.2f);**  **glVertex2f(-0.3f, 0.2f);**  **glVertex2f(-0.3f, 0.3f);**  **glVertex2f(-0.2f, 0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.3f, 0.2f);**  **glVertex2f(-0.4f, 0.2f);**  **glVertex2f(-0.4f, 0.3f);**  **glVertex2f(-0.3f, 0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.0f, 0.3f);**  **glVertex2f(-0.1f, 0.3f);**  **glVertex2f(-0.1f, 0.4f);**  **glVertex2f(-0.0f, 0.4f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  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0.0f);//black**  **glVertex2f(0.2f, 0.0f);**  **glVertex2f(0.3f, 0.0f);**  **glVertex2f(0.3f, 0.1f);**  **glVertex2f(0.2f, 0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.3f, 0.0f);**  **glVertex2f(0.4f, 0.0f);**  **glVertex2f(0.4f, 0.1f);**  **glVertex2f(0.3f, 0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.0f, 0.1f);**  **glVertex2f(0.1f, 0.1f);**  **glVertex2f(0.1f, 0.2f);**  **glVertex2f(0.0f, 0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.1f, 0.1f);**  **glVertex2f(0.2f, 0.1f);**  **glVertex2f(0.2f, 0.2f);**  **glVertex2f(0.1f, 0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.2f, 0.1f);**  **glVertex2f(0.3f, 0.1f);**  **glVertex2f(0.3f, 0.2f);**  **glVertex2f(0.2f, 0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  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-0.0f);**  **glVertex2f(0.2f, -0.0f);**  **glVertex2f(0.2f, -0.1f);**  **glVertex2f(0.1f, -0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.2f, -0.0f);**  **glVertex2f(0.3f, -0.0f);**  **glVertex2f(0.3f, -0.1f);**  **glVertex2f(0.2f, -0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.3f, -0.0f);**  **glVertex2f(0.4f, -0.0f);**  **glVertex2f(0.4f, -0.1f);**  **glVertex2f(0.3f, -0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.0f, -0.1f);**  **glVertex2f(0.1f, -0.1f);**  **glVertex2f(0.1f, -0.2f);**  **glVertex2f(0.0f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.1f, -0.1f);**  **glVertex2f(0.2f, -0.1f);**  **glVertex2f(0.2f, -0.2f);**  **glVertex2f(0.1f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.2f, -0.1f);**  **glVertex2f(0.3f, -0.1f);**  **glVertex2f(0.3f, -0.2f);**  **glVertex2f(0.2f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.3f, -0.1f);**  **glVertex2f(0.4f, -0.1f);**  **glVertex2f(0.4f, -0.2f);**  **glVertex2f(0.3f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.0f, -0.2f);**  **glVertex2f(0.1f, -0.2f);**  **glVertex2f(0.1f, -0.3f);**  **glVertex2f(0.0f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.1f, -0.2f);**  **glVertex2f(0.2f, -0.2f);**  **glVertex2f(0.2f, -0.3f);**  **glVertex2f(0.1f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.2f, -0.2f);**  **glVertex2f(0.3f, -0.2f);**  **glVertex2f(0.3f, -0.3f);**  **glVertex2f(0.2f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.3f, -0.2f);**  **glVertex2f(0.4f, -0.2f);**  **glVertex2f(0.4f, -0.3f);**  **glVertex2f(0.3f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.0f, -0.3f);**  **glVertex2f(0.1f, -0.3f);**  **glVertex2f(0.1f, -0.4f);**  **glVertex2f(0.0f, -0.4f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.1f, -0.3f);**  **glVertex2f(0.2f, -0.3f);**  **glVertex2f(0.2f, -0.4f);**  **glVertex2f(0.1f, -0.4f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.2f, -0.3f);**  **glVertex2f(0.3f, -0.3f);**  **glVertex2f(0.3f, -0.4f);**  **glVertex2f(0.2f, -0.4f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(0.3f, -0.3f);**  **glVertex2f(0.4f, -0.3f);**  **glVertex2f(0.4f, -0.4f);**  **glVertex2f(0.3f, -0.4f);**  **glEnd();**  **//(-x,-y)**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.0f, -0.0f);**  **glVertex2f(-0.1f, -0.0f);**  **glVertex2f(-0.1f, -0.1f);**  **glVertex2f(-0.0f, -0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.1f, -0.0f);**  **glVertex2f(-0.2f, -0.0f);**  **glVertex2f(-0.2f, -0.1f);**  **glVertex2f(-0.1f, -0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.2f, -0.0f);**  **glVertex2f(-0.3f, -0.0f);**  **glVertex2f(-0.3f, -0.1f);**  **glVertex2f(-0.2f, -0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.3f, -0.0f);**  **glVertex2f(-0.4f, -0.0f);**  **glVertex2f(-0.4f, -0.1f);**  **glVertex2f(-0.3f, -0.1f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.0f, -0.1f);**  **glVertex2f(-0.1f, -0.1f);**  **glVertex2f(-0.1f, -0.2f);**  **glVertex2f(-0.0f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.1f, -0.1f);**  **glVertex2f(-0.2f, -0.1f);**  **glVertex2f(-0.2f, -0.2f);**  **glVertex2f(-0.1f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.2f, -0.1f);**  **glVertex2f(-0.3f, -0.1f);**  **glVertex2f(-0.3f, -0.2f);**  **glVertex2f(-0.2f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.3f, -0.1f);**  **glVertex2f(-0.4f, -0.1f);**  **glVertex2f(-0.4f, -0.2f);**  **glVertex2f(-0.3f, -0.2f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.0f, -0.2f);**  **glVertex2f(-0.1f, -0.2f);**  **glVertex2f(-0.1f, -0.3f);**  **glVertex2f(-0.0f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.1f, -0.2f);**  **glVertex2f(-0.2f, -0.2f);**  **glVertex2f(-0.2f, -0.3f);**  **glVertex2f(-0.1f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.2f, -0.2f);**  **glVertex2f(-0.3f, -0.2f);**  **glVertex2f(-0.3f, -0.3f);**  **glVertex2f(-0.2f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.3f, -0.2f);**  **glVertex2f(-0.4f, -0.2f);**  **glVertex2f(-0.4f, -0.3f);**  **glVertex2f(-0.3f, -0.3f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.0f, -0.3f);**  **glVertex2f(-0.1f, -0.3f);**  **glVertex2f(-0.1f, -0.4f);**  **glVertex2f(-0.0f, -0.4f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.1f, -0.3f);**  **glVertex2f(-0.2f, -0.3f);**  **glVertex2f(-0.2f, -0.4f);**  **glVertex2f(-0.1f, -0.4f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(1.0f, 1.0f, 1.0f);//white**  **glVertex2f(-0.2f, -0.3f);**  **glVertex2f(-0.3f, -0.3f);**  **glVertex2f(-0.3f, -0.4f);**  **glVertex2f(-0.2f, -0.4f);**  **glEnd();**  **glBegin(GL\_QUADS);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.3f, -0.3f);**  **glVertex2f(-0.4f, -0.3f);**  **glVertex2f(-0.4f, -0.4f);**  **glVertex2f(-0.3f, -0.4f);**  **glEnd();**  **glFlush(); // Render now**  **}**  **/\* Main function: GLUT runs as a console application starting at main() \*/**  **int main(int argc, char\*\* argv) {**  **glutInit(&argc, argv); // Initialize GLUT**  **glutCreateWindow("OpenGL Setup"); // Create a window with the given title**  **glutInitWindowSize(420, 420); // Set the window's initial width & height**  **glutDisplayFunc(display); // Register display callback handler for window re-paint**  **glutMainLoop(); // Enter the event-processing loop**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-** |

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| --- |
| **Question- 3**  Create the batman logo given below- |
| **Graph Plot (Picture)-**  **(Not Needed)** |
| **Code-**  **#include <windows.h> // for MS Windows**  **#include <GL/glut.h> // GLUT, include glu.h and gl.h**  **/\* Handler for window-repaint event. Call back when the window first appears and**  **whenever the window needs to be re-painted. \*/**  **void display() {**  **glClearColor(1.0f, 1.0f, 1.0f, 1.0f); // Set background color to white and opaque**  **glClear(GL\_COLOR\_BUFFER\_BIT); // Clear the color buffer (background)**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.21f, 0.63f);**  **glVertex2f(-0.43f, 0.41f);**  **glVertex2f(-0.43f, 0.19f);**  **glVertex2f(-0.21f, -0.03f);**  **glVertex2f(0.3f, -0.03f);**  **glVertex2f(0.53f, 0.19f);**  **glVertex2f(0.53f, 0.41f);**  **glVertex2f(0.31f, 0.63f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor4f(1.0f, 1.0f, 0.0f, 0.0f);//yellow**  **glVertex2f(-0.2f, 0.6f);**  **glVertex2f(-0.4f, 0.4f);**  **glVertex2f(-0.4f, 0.2f);**  **glVertex2f(-0.2f, 0.0f);**  **glVertex2f(0.3f, 0.0f);**  **glVertex2f(0.5f, 0.2f);**  **glVertex2f(0.5f, 0.4f);**  **glVertex2f(0.3f, 0.6f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.05f, 0.3f);**  **glVertex2f(-0.35f, 0.35f);**  **glVertex2f(-0.35f, 0.25f);**  **glVertex2f(-0.15f, 0.05f);**  **glVertex2f(-0.05f, 0.15f);**  **glVertex2f(0.05f, 0.05f);**  **glVertex2f(0.15f, 0.15f);**  **glVertex2f(0.25f, 0.05f);**  **glVertex2f(0.45f, 0.25f);**  **glVertex2f(0.45f, 0.35f);**  **glVertex2f(0.15f, 0.3f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.1f, 0.50f);**  **glVertex2f(-0.05f, 0.50f);**  **glVertex2f(-0.05f, 0.55f);**  **glVertex2f(-0.15f, 0.55f);**  **glVertex2f(-0.35f, 0.35f);**  **glVertex2f(-0.1f, 0.35f);**  **glEnd();**  **glBegin(GL\_TRIANGLES);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(-0.35f, 0.35f);**  **glVertex2f(-0.1f, 0.35f);**  **glVertex2f(-0.05f, 0.3f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.25f, 0.55f);**  **glVertex2f(0.15f, 0.55f);**  **glVertex2f(0.15f, 0.5f);**  **glVertex2f(0.2f, 0.5f);**  **glVertex2f(0.2f, 0.35f);**  **glVertex2f(0.45f, 0.35f);**  **glVertex2f(0.2f, 0.35f);**  **glEnd();**  **glBegin(GL\_TRIANGLES);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.15f, 0.3f);**  **glVertex2f(0.2f, 0.35f);**  **glVertex2f(0.45f, 0.35f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.0f, 0.35f);**  **glVertex2f(-0.05f, 0.3f);**  **glVertex2f(0.15f, 0.3f);**  **glVertex2f(0.1f, 0.35f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.0f, 0.35f);**  **glVertex2f(0.1f, 0.35f);**  **glVertex2f(0.1f, 0.5f);**  **glVertex2f(0.0f, 0.5f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.0f, 0.55f);**  **glVertex2f(0.0f, 0.5f);**  **glVertex2f(0.03f, 0.5f);**  **glVertex2f(0.03f, 0.55f);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3f(0.0f, 0.0f, 0.0f);//black**  **glVertex2f(0.07f, 0.55f);**  **glVertex2f(0.07f, 0.5f);**  **glVertex2f(0.1f, 0.5f);**  **glVertex2f(0.1f, 0.55f);**  **glEnd();**  **glFlush(); // Render now**  **}**  **/\* Main function: GLUT runs as a console application starting at main() \*/**  **int main(int argc, char\*\* argv) {**  **glutInit(&argc, argv); // Initialize GLUT**  **glutCreateWindow("OpenGL Setup"); // Create a window with the given title**  **glutInitWindowSize(420, 420); // Set the window's initial width & height**  **glutDisplayFunc(display); // Register display callback handler for window re-paint**  **glutMainLoop(); // Enter the event-processing loop**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-** |