**Lab Taks-5**

Submission Guidelines-

* Rename the file with your serial number only
* Must submit within the announced time.
* Must include resources for all the section in the table

|  |
| --- |
| **Question-1**  Create an animation using two box that will move in the opposite direction. |
| **Graph Plot (Picture)-** |
| **Code-**  **#include <windows.h>**  **#include <GL/glut.h>**  **float \_move = 0.0f;**  **float \_move1 = 0.0f;**  **void object1()**  **{**  **glMatrixMode(GL\_MODELVIEW);**  **glPushMatrix();**  **glTranslatef(\_move, 0.0f, 0.0f);**  **glBegin(GL\_POLYGON);**  **glColor3f(1.0f, 0.0f, 0.0f);**  **glVertex2f(0.0f,0.0f);**  **glVertex2f(1.0f,0.0f);**  **glVertex2f(1.0f,1.0f);**  **glVertex2f(0.0f,1.0f);**  **glEnd();**  **glPopMatrix();**  **}**  **void object2()**  **{**  **glMatrixMode(GL\_MODELVIEW);**  **glPushMatrix();**  **glTranslatef(\_move1, 0.0f, 0.0f);**  **glBegin(GL\_POLYGON);**  **glColor3f(1.0f, 1.0f, 0.0f);**  **glVertex2f(0.0f,0.0f);**  **glVertex2f(1.0f,0.0f);**  **glVertex2f(1.0f,-1.0f);**  **glVertex2f(0.0f,-1.0f); // x, y**  **glEnd();**  **glPopMatrix();**  **}**  **void display() {**  **glClearColor(0.0f, 0.0f, 0.0f, 1.0f);**  **glClear(GL\_COLOR\_BUFFER\_BIT);**  **object1();**  **object2();**  **glutSwapBuffers();**  **glFlush();**  **}**  **void update(int value) {**  **\_move += .02;**  **if(\_move > 2.5)**  **{**  **\_move = -3.0;**  **}**  **glutPostRedisplay();**  **glutTimerFunc(20, update, 0);**  **}**  **void update1(int value) {**  **\_move1 -= .02;**  **if(\_move1 < -2.5)**  **{**  **\_move1 = 3.0;**  **}**  **glutPostRedisplay();**  **glutTimerFunc(20, update1, 0);**  **}**  **int main(int argc, char\*\* argv) {**  **glutInit(&argc, argv);**  **glutCreateWindow("OpenGL Setup Test");**  **glutInitWindowSize(320, 320);**  **gluOrtho2D(-3,3,-3,3);**  **glutDisplayFunc(display);**  **glutTimerFunc(20, update, 0);**  **glutTimerFunc(20, update1, 0);**  **glutMainLoop();**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-** |

|  |
| --- |
| **Question-2**  Design a car which will have rotating wheels. |
| **Graph Plot (Picture)-** |
| **Code-** |
| **Output Screenshot (Full Screen)-** |

|  |
| --- |
| **Question-3**  Now move your car of question-2 from left to right in a loop. |
| **Graph Plot (Picture)-** |
| **Code-** |
| **Output Screenshot (Full Screen)-** |

|  |
| --- |
| **Question-4**  Design a windmill with rotating blades |
| **Graph Plot (Picture)-** |
| **Code-** |
| **Output Screenshot (Full Screen)-** |