**Lab Taks-4**

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-4
* Must include resources for all the section in the table

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| **Question- 1**  Draw the scenario of a traffic signal using function to represent each object |
| **Graph Plot (Picture)-** |
| **Code-**  #include <windows.h>  #include <GL/glut.h>  #include <math.h>  void backcar()  {  glBegin(GL\_POLYGON);  glColor3ub(67, 64, 61 );  glVertex2f(-2,2);  glVertex2f(-2,6);  glVertex2f(2,6);  glVertex2f(2,2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(-0.2,2);  glVertex2f(-0.2,3.2);  glVertex2f(0.2,3.2);  glVertex2f(0.2,2);  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(0,0,0);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=0.3;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-1.1,y+3.2);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(0,0,0);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=0.3;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+1.1,y+3.2);  }  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(144, 12, 63);  glVertex2f(-1.4,3.4);  glVertex2f(-1.4,4);  glVertex2f(1.4,4);  glVertex2f(1.4,3.4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(220, 207, 163);  glVertex2f(-1.4,3.2);  glVertex2f(-1.4,3.4);  glVertex2f(1.4,3.4);  glVertex2f(1.4,3.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(144, 12, 63);  glVertex2f(-1,4);  glVertex2f(-0.9,5);  glVertex2f(0.9,5);  glVertex2f(1,4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(238, 228, 197);  glVertex2f(-0.8,4.2);  glVertex2f(-0.7,4.8);  glVertex2f(0.7,4.8);  glVertex2f(0.8,4.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(232, 131, 17);  glVertex2f(-1.4,3.8);  glVertex2f(-1.4,4);  glVertex2f(-1.2,4);  glVertex2f(-1.2,3.8);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(232, 131, 17);  glVertex2f(1.2,3.8);  glVertex2f(1.2,4);  glVertex2f(1.4,4);  glVertex2f(1.4,3.8);  glEnd();  }  void car()  {  glBegin(GL\_POLYGON);  glColor3ub(67, 64, 61 );  glVertex2f(2,2);  glVertex2f(11,2);  glVertex2f(11,-2);  glVertex2f(2,-2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(2,-0.2);  glVertex2f(2,0.2);  glVertex2f(3.5,0.2);  glVertex2f(3.5,-0.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(5.1,-0.2);  glVertex2f(5.1,0.2);  glVertex2f(6.8,0.2);  glVertex2f(6.8,-0.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(8.5,-0.2);  glVertex2f(8.5,0.2);  glVertex2f(10,0.2);  glVertex2f(10,-0.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(80, 124, 243);  glVertex2f(3,-0.1);  glVertex2f(3,1);  glVertex2f(9,1);  glVertex2f(9,-0.1);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(80, 124, 243);  glVertex2f(4,1);  glVertex2f(4.96,1.8);  glVertex2f(7.02,1.8);  glVertex2f(8,1);  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(55,55,55);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=0.5;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+5,y+0);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(55,55,55);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=0.5;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+7,y+0);  }  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(247, 194, 12);  glVertex2f(3,0.7);  glVertex2f(3,1);  glVertex2f(3.3,1);  glVertex2f(3.3,0.7);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(247, 194, 12);  glVertex2f(9,0.7);  glVertex2f(9,1);  glVertex2f(8.7,1);  glVertex2f(8.7,0.7);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(233, 228, 211);  glVertex2f(4.8,1.1);  glVertex2f(5.1,1.5);  glVertex2f(5.8,1.5);  glVertex2f(5.8,1.1);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(233, 228, 211);  glVertex2f(6.2,1.1);  glVertex2f(6.2,1.5);  glVertex2f(6.9,1.5);  glVertex2f(7.2,1.1);  glEnd();  }  void bench()  {  glBegin(GL\_POLYGON);  glColor3ub(194, 184, 140);  glVertex2f(2,-5);  glVertex2f(2,-2);  glVertex2f(11,-2);  glVertex2f(11,-5);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(177, 130, 61);  glVertex2f(4.4,-4);  glVertex2f(4.8,-2.4);  glVertex2f(6.4,-2.4);  glVertex2f(6,-4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(177, 130, 61);  glVertex2f(4.4,-4.8);  glVertex2f(4.4,-4);  glVertex2f(4.8,-4);  glVertex2f(4.8,-4.8);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(177, 130, 61);  glVertex2f(5.6,-4.8);  glVertex2f(5.6,-4);  glVertex2f(6,-4);  glVertex2f(6,-4.8);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(189, 140, 70);  glVertex2f(6.1,-3.4);  glVertex2f(6.4,-2.4);  glVertex2f(6.4,-3.4);  glEnd();  }  void cross()  {  glBegin(GL\_POLYGON);  glColor3ub(67, 64, 61 );  glVertex2f(-2,-5);  glVertex2f(-2,-2);  glVertex2f(2,-2);  glVertex2f(2,-5);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(-1.5,-4);  glVertex2f(-1.5,-2.5);  glVertex2f(-1.1,-2.5);  glVertex2f(-1.1,-4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(-0.8,-4);  glVertex2f(-0.8,-2.5);  glVertex2f(-0.4,-2.5);  glVertex2f(-0.4,-4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(-0.1,-4);  glVertex2f(-0.1,-2.5);  glVertex2f(0.3,-2.5);  glVertex2f(0.3,-4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(0.6,-4);  glVertex2f(0.6,-2.5);  glVertex2f(1,-2.5);  glVertex2f(1,-4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(1.3,-4);  glVertex2f(1.3,-2.5);  glVertex2f(1.7,-2.5);  glVertex2f(1.7,-4);  glEnd();  }  void trafficlight()  {  glBegin(GL\_POLYGON);  glColor3ub(67, 64, 61 );  glVertex2f(-10,-2);  glVertex2f(-10,2);  glVertex2f(-2,2);  glVertex2f(-2,-2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(194, 184, 140);  glVertex2f(-10,-5);  glVertex2f(-10,-2);  glVertex2f(-2,-2);  glVertex2f(-2,-5);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(194, 184, 140);  glVertex2f(-10,2);  glVertex2f(-10,6);  glVertex2f(-2,6);  glVertex2f(-2,2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(-3.5,-0.2);  glVertex2f(-3.5,0.2);  glVertex2f(-2,0.2);  glVertex2f(-2,-0.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(-6.5,-0.2);  glVertex2f(-6.5,0.2);  glVertex2f(-5,0.2);  glVertex2f(-5,-0.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(250, 249, 245);  glVertex2f(-9.5,-0.2);  glVertex2f(-9.5,0.2);  glVertex2f(-8,0.2);  glVertex2f(-8,-0.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(163, 156, 149);  glVertex2f(-8,-4);  glVertex2f(-8,-3);  glVertex2f(-7,-3);  glVertex2f(-7,-4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(163, 156, 149);  glVertex2f(-8.42,-5);  glVertex2f(-8.42,-4);  glVertex2f(-6.57,-4);  glVertex2f(-6.57,-5);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(163, 156, 149);  glVertex2f(-8,-3);  glVertex2f(-8,3);  glVertex2f(-7,3);  glVertex2f(-7,-3);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(163, 156, 149);  glVertex2f(-8,-4);  glVertex2f(-8,-3);  glVertex2f(-7,-3);  glVertex2f(-7,-4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(163, 156, 149);  glVertex2f(-8.42,-5);  glVertex2f(-8.42,-4);  glVertex2f(-6.57,-4);  glVertex2f(-6.57,-5);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(163, 156, 149);  glVertex2f(-8,2);  glVertex2f(-8,3);  glVertex2f(-6,3);  glVertex2f(-6,2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(163, 156, 149);  glVertex2f(-6,1.81);  glVertex2f(-6,3.25);  glVertex2f(-3.02,3.25);  glVertex2f(-3.02,1.81);  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(207, 17, 11 );  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3-2.57;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-5.47,y+2.57);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(207, 187, 11 );  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3-2.57;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-4.5,y+2.57);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(32, 176, 23);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3-2.57;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-3.5,y+2.57);  }  glEnd();  }  void road()  {  glBegin(GL\_POLYGON);  glColor3ub(67, 64, 61 );  glVertex2f(-2,-2);  glVertex2f(-2,2);  glVertex2f(2,2);  glVertex2f(2,-2);  glEnd();  }  void tree()  {  glBegin(GL\_POLYGON);  glColor3ub(115, 59, 3 );  glVertex2f(9.39,3.19);  glVertex2f(9.39,5.01);  glVertex2f(10.23,5.01);  glVertex2f(10.23,3.19);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(99, 51, 3 );  glVertex2f(9.08,2.64);  glVertex2f(9.39,3.19);  glVertex2f(10.23,3.19);  glVertex2f(10.56,2.65);  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(40, 161, 32 );  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=6.89-5.96;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+9.73,y+5.96);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(29, 146, 21 );  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=5.91-5.01;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+10.23,y+5.01);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(32, 176, 23);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=5.93-5.01;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+9.33,y+5.01);  }  glEnd();  }  void home()  {  glBegin(GL\_POLYGON);  glColor3ub(113, 195, 245);  glVertex2f(-10,6);  glVertex2f(-10,8);  glVertex2f(11,8);  glVertex2f(11,6);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(194, 184, 140);  glVertex2f(2,2);  glVertex2f(2,6);  glVertex2f(11,6);  glVertex2f(11,2);  glEnd();  //border  glBegin(GL\_POLYGON);  glColor3ub(154, 11, 24);  glVertex2f(2.996,2.611);  glVertex2f(3,8);  glVertex2f(8,8);  glVertex2f(8.023,2.595);  glEnd();  //2  glBegin(GL\_POLYGON);  glColor3ub(11, 154, 154);  glVertex2f(3.99,6.57);  glVertex2f(4.01,7.37);  glVertex2f(4.99,7.37);  glVertex2f(5.01,6.57);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(11, 154, 154);  glVertex2f(5.99,6.57);  glVertex2f(6.01,7.37);  glVertex2f(6.99,7.37);  glVertex2f(7.01,6.57);  glEnd();  //1  glBegin(GL\_POLYGON);  glColor3ub(11, 154, 154);  glVertex2f(4,5);  glVertex2f(4.01,5.8);  glVertex2f(4.99,5.8);  glVertex2f(5,5);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(11, 154, 154);  glVertex2f(6,5);  glVertex2f(6.01,5.8);  glVertex2f(6.99,5.8);  glVertex2f(7,5);  glEnd();  //door  glBegin(GL\_POLYGON);  glColor3ub(92, 62, 5);  glVertex2f(4.78,2.65);  glVertex2f(4.79,4.4);  glVertex2f(6.18,4.4);  glVertex2f(6.18,2.58);  glEnd();  }  void display()  {  glClearColor(1,1,1,1);  glClear(GL\_COLOR\_BUFFER\_BIT);  home();  tree();  cross();  car();  trafficlight();  backcar();  road();  bench();  glFlush();  }  int main(int argc, char\*\* argv)  {  glutInit(&argc, argv);  glutCreateWindow("OpenGL Scenery");  glutInitWindowSize(320,320);  glutDisplayFunc(display);  gluOrtho2D(-10,11,-5,8);  glutMainLoop();  return 0;  } |
| **Output Screenshot (Full Screen)-** |

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| **Question- 2**  Draw two village scenarios for day and night using function to represent each object |
| **Graph Plot (Picture)-** |
| **Code-**  **\*\*DayVillage**  #include <windows.h>  #include <GL/glut.h>  #include <math.h>  void farvillage()  {  //sky  glBegin(GL\_POLYGON);  glColor3ub(90, 225, 254);  glVertex2f(-10,1);  glVertex2f(-10,5);  glVertex2f(10,5);  glVertex2f(10,1);  glEnd();  //farvillage  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=2-1;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-9,y+1);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=2.4-1.4;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-8.1,y+1.4);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=2-1;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-6.7,y+1);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=2.7-1.7;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-5,y+1.7);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3.8-2.2;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-3,y+2.2);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3.9-3;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-1,y+3);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3-2;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+1,y+2);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3.4-2;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+2.6,y+2);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(240, 215, 33);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3.7-2;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+6.5,y+2);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3-1;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+4.9,y+1);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3.1-1.6;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+8.9,y+1.6);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=2-1.1;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+6.9,y+1.1);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(93, 175, 20);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3.1-1.7;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-0.5,y+2);  }  glEnd();  //fronthome  glBegin(GL\_POLYGON);  glColor3ub(232, 191, 104);  glVertex2f(-10,-3);  glVertex2f(-10,1);  glVertex2f(10,1);  glVertex2f(10,-2);  glEnd();  //tree  glBegin(GL\_POLYGON);  glColor3ub(138, 87, 8 );  glVertex2f(-0.4,1);  glVertex2f(-0.4,2);  glVertex2f(0,2);  glVertex2f(0,0.5);  glEnd();  //home2  glBegin(GL\_POLYGON);  glColor3ub(191, 134, 67);  glVertex2f(1.2,0);  glVertex2f(1.2,1);  glVertex2f(3.2,1);  glVertex2f(3.2,0);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(151, 130, 57);  glVertex2f(1,1);  glVertex2f(1.4,2);  glVertex2f(3,2);  glVertex2f(3.4,1);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(128, 79, 19);  glVertex2f(1.8,0);  glVertex2f(1.8,0.8);  glVertex2f(2.6,0.8);  glVertex2f(2.6,0);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(104, 59, 5);  glVertex2f(1.3,-0.2);  glVertex2f(1.3,0);  glVertex2f(3.2,0);  glVertex2f(3.2,-0.2);  glEnd();  //paddy  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(232, 174, 19);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=1-0;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+0.4,y+0);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(232, 174, 19);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=1-0.4;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+0.9,y-0.4);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(34, 118, 12);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=4.2-3.3;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-0.3,y+3.3);  }  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(138, 87, 8 );  glVertex2f(-0.2,-1);  glVertex2f(-0.2,-0.8);  glVertex2f(1.5,-0.8);  glVertex2f(1.5,-1);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(138, 87, 8 );  glVertex2f(0.3,1);  glVertex2f(0.4,1.4);  glVertex2f(0.5,1);  glEnd();  //home1  glBegin(GL\_POLYGON);  glColor3ub(148, 131, 101);  glVertex2f(-5,0.9);  glVertex2f(-4,2);  glVertex2f(-3.7,1.7);  glVertex2f(-4.5,0.9);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(218, 138, 15);  glVertex2f(-4.5,-0.2);  glVertex2f(-4.5,0.9);  glVertex2f(-3.7,1.7);  glVertex2f(-3,0.7);  glVertex2f(-3,-1);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(228, 150, 30);  glVertex2f(-3,-1);  glVertex2f(-3,0.7);  glVertex2f(-0.2,0.7);  glVertex2f(-0.2,-1);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(145, 130, 104 );  glVertex2f(-2.9,0.5);  glVertex2f(-4,2);  glVertex2f(-1,2);  glVertex2f(0,0.5);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(236, 200, 17);  glVertex2f(-4,0.2);  glVertex2f(-4,0.7);  glVertex2f(-3.5,0.5);  glVertex2f(-3.5,0);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(180, 130, 8);  glVertex2f(-2,-1);  glVertex2f(-2,0);  glVertex2f(-1.2,0);  glVertex2f(-1.2,-1);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(188, 120, 16);  glVertex2f(-4.7,-0.3);  glVertex2f(-4.5,-0.2);  glVertex2f(-3,-1);  glVertex2f(-3,-1.2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(188, 120, 16);  glVertex2f(-3,-1.2);  glVertex2f(-3,-1);  glVertex2f(-0.2,-1);  glVertex2f(-0,-1.2);  glEnd();  //tree  glBegin(GL\_POLYGON);  glColor3ub(138, 87, 8 );  glVertex2f(-0.4,2);  glVertex2f(-0.7,2.5);  glVertex2f(-0.5,2.5);  glVertex2f(-0.2,2);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(138, 87, 8 );  glVertex2f(-0.2,2);  glVertex2f(0.2,2.9);  glVertex2f(0.5,2.9);  glVertex2f(0,2);  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(25, 146, 8);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=4.3-3.5;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-2.3,y+3.5);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(25, 146, 8);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=5.3-4.3;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+0,y+4.3);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(28, 156, 10);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=5-4;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-1.4,y+4);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(28, 156, 10);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=5-4;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+1.5,y+4);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(29, 143, 14);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=4.5-3.5;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x+1,y+3.5);  }  glEnd();  glBegin(GL\_POLYGON);  for(int i=0;i<200;i++)  {  glColor3ub(29, 143, 14);  float pi=3.1416;  float A=(i\*2\*pi)/200;  float r=3.8-3;  float x = r \* cos(A);  float y = r \* sin(A);  glVertex2f(x-1,y+3);  }  glEnd();  }  void river()  {  //river  glBegin(GL\_POLYGON);  glColor3ub(4, 193, 235);  glVertex2f(-10,-5);  glVertex2f(-10,-2.9);  glVertex2f(10,-2.1);  glVertex2f(10,-5);  glEnd();  //riverside1  glBegin(GL\_POLYGON);  glColor3ub(156, 91, 8);  glVertex2f(-10,-2.5);  glVertex2f(-0.9,-2.5);  glVertex2f(0,-2.9);  glVertex2f(-10,-2.9);  glEnd();  //riverside2  glBegin(GL\_POLYGON);  glColor3ub(156, 91, 8);  glVertex2f(-0.9,-2.5);  glVertex2f(-1.3,-2);  glVertex2f(10,-2);  glVertex2f(10,-2.5);  glEnd();  //riverside2  glBegin(GL\_POLYGON);  glColor3ub(156, 91, 8);  glVertex2f(-0.9,-2.5);  glVertex2f(-1.3,-2);  glVertex2f(-0.4,-2.5);  glVertex2f(0,-2.9);  glEnd();  //boatout  glBegin(GL\_POLYGON);  glColor3ub(100, 59, 6);  glVertex2f(-8,-4.2);  glVertex2f(-8.8,-3.2);  glVertex2f(-7.5,-3.8);  glVertex2f(-5.2,-3.8);  glVertex2f(-4,-3.2);  glVertex2f(-4.8,-4.2);  glEnd();  //boatin1  glBegin(GL\_POLYGON);  glColor3ub(159, 111, 49);  glVertex2f(-7.5,-3.8);  glVertex2f(-8.8,-3.2);  glVertex2f(-7.5,-3.4);  glVertex2f(-6.8,-3.8);  glEnd();  //boatin2  glBegin(GL\_POLYGON);  glColor3ub(159, 111, 49);  glVertex2f(-6.8,-3.8);  glVertex2f(-7.5,-3.4);  glVertex2f(-6,-3.4);  glVertex2f(-5.2,-3.8);  glEnd();  //boatin3  glBegin(GL\_POLYGON);  glColor3ub(159, 111, 49);  glVertex2f(-5.2,-3.8);  glVertex2f(-6,-3.4);  glVertex2f(-5.3,-3.4);  glVertex2f(-4,-3.2);  glEnd();  glLineWidth(10);  glBegin(GL\_LINES);  glColor3ub(151, 96, 25);  glVertex2f(-5.2,-3.8);  glVertex2f(-6,-3.4);  glEnd();  glLineWidth(10);  glBegin(GL\_LINES);  glColor3ub(151, 96, 25);  glVertex2f(-6.8,-3.8);  glVertex2f(-7.6,-3.4);  glEnd();  glBegin(GL\_POLYGON);  glColor3ub(209, 156, 58);  glVertex2f(-8.3,-3.4);  glVertex2f(-8.3,-2);  glVertex2f(-8,-2);  glVertex2f(-8,-3.6);  glEnd();  }  void display()  {  glClearColor(1,1,1,1);  glClear(GL\_COLOR\_BUFFER\_BIT);  farvillage();  river();  glFlush();  }  int main(int argc, char\*\* argv)  {  glutInit(&argc, argv);  glutCreateWindow("OpenGL Scenery");  glutInitWindowSize(320,320);  glutDisplayFunc(display);  gluOrtho2D(-10,10,-5,5);  glutMainLoop();  return 0;  }  **\*\*NightVillage**  **#include <windows.h>**  **#include <GL/glut.h>**  **#include <math.h>**  **void farvillage()**  **{**  **//sky**  **glBegin(GL\_POLYGON);**  **glColor3ub(101, 110, 135);**  **glVertex2f(-10,1);**  **glVertex2f(-10,5);**  **glVertex2f(10,5);**  **glVertex2f(10,1);**  **glEnd();**  **//farvillage**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=2-1;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-9,y+1);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=2.4-1.4;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-8.1,y+1.4);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=2-1;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-6.7,y+1);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=2.7-1.7;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-5,y+1.7);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3.8-2.2;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-3,y+2.2);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3.9-3;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-1,y+3);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3-2;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+1,y+2);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3.4-2;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+2.6,y+2);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(251, 248, 238);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3.7-2;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+6.5,y+2);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3-1;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+4.9,y+1);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3.1-1.6;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+8.9,y+1.6);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=2-1.1;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+6.9,y+1.1);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub( 19, 107, 13);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3.1-1.7;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-0.5,y+2);**  **}**  **glEnd();**  **//fronthome**  **glBegin(GL\_POLYGON);**  **glColor3ub(173, 150, 6 );**  **glVertex2f(-10,-3);**  **glVertex2f(-10,1);**  **glVertex2f(10,1);**  **glVertex2f(10,-2);**  **glEnd();**  **//tree**  **glBegin(GL\_POLYGON);**  **glColor3ub(138, 87, 8 );**  **glVertex2f(-0.4,1);**  **glVertex2f(-0.4,2);**  **glVertex2f(0,2);**  **glVertex2f(0,0.5);**  **glEnd();**  **//home2**  **glBegin(GL\_POLYGON);**  **glColor3ub(191, 134, 67);**  **glVertex2f(1.2,0);**  **glVertex2f(1.2,1);**  **glVertex2f(3.2,1);**  **glVertex2f(3.2,0);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(151, 130, 57);**  **glVertex2f(1,1);**  **glVertex2f(1.4,2);**  **glVertex2f(3,2);**  **glVertex2f(3.4,1);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(128, 79, 19);**  **glVertex2f(1.8,0);**  **glVertex2f(1.8,0.8);**  **glVertex2f(2.6,0.8);**  **glVertex2f(2.6,0);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(104, 59, 5);**  **glVertex2f(1.3,-0.2);**  **glVertex2f(1.3,0);**  **glVertex2f(3.2,0);**  **glVertex2f(3.2,-0.2);**  **glEnd();**  **//paddy**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(212, 184, 9);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=1-0;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+0.4,y+0);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(212, 184, 9);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=1-0.4;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+0.9,y-0.4);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(34, 118, 12);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=4.2-3.3;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-0.3,y+3.3);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(138, 87, 8 );**  **glVertex2f(-0.2,-1);**  **glVertex2f(-0.2,-0.8);**  **glVertex2f(1.5,-0.8);**  **glVertex2f(1.5,-1);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(138, 87, 8 );**  **glVertex2f(0.3,1);**  **glVertex2f(0.4,1.4);**  **glVertex2f(0.5,1);**  **glEnd();**  **//home1**  **glBegin(GL\_POLYGON);**  **glColor3ub(148, 131, 101);**  **glVertex2f(-5,0.9);**  **glVertex2f(-4,2);**  **glVertex2f(-3.7,1.7);**  **glVertex2f(-4.5,0.9);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(218, 138, 15);**  **glVertex2f(-4.5,-0.2);**  **glVertex2f(-4.5,0.9);**  **glVertex2f(-3.7,1.7);**  **glVertex2f(-3,0.7);**  **glVertex2f(-3,-1);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(228, 150, 30);**  **glVertex2f(-3,-1);**  **glVertex2f(-3,0.7);**  **glVertex2f(-0.2,0.7);**  **glVertex2f(-0.2,-1);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(145, 130, 104 );**  **glVertex2f(-2.9,0.5);**  **glVertex2f(-4,2);**  **glVertex2f(-1,2);**  **glVertex2f(0,0.5);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(236, 200, 17);**  **glVertex2f(-4,0.2);**  **glVertex2f(-4,0.7);**  **glVertex2f(-3.5,0.5);**  **glVertex2f(-3.5,0);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(180, 130, 8);**  **glVertex2f(-2,-1);**  **glVertex2f(-2,0);**  **glVertex2f(-1.2,0);**  **glVertex2f(-1.2,-1);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(188, 120, 16);**  **glVertex2f(-4.7,-0.3);**  **glVertex2f(-4.5,-0.2);**  **glVertex2f(-3,-1);**  **glVertex2f(-3,-1.2);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(188, 120, 16);**  **glVertex2f(-3,-1.2);**  **glVertex2f(-3,-1);**  **glVertex2f(-0.2,-1);**  **glVertex2f(-0,-1.2);**  **glEnd();**  **//tree**  **glBegin(GL\_POLYGON);**  **glColor3ub(138, 87, 8 );**  **glVertex2f(-0.4,2);**  **glVertex2f(-0.7,2.5);**  **glVertex2f(-0.5,2.5);**  **glVertex2f(-0.2,2);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub(138, 87, 8 );**  **glVertex2f(-0.2,2);**  **glVertex2f(0.2,2.9);**  **glVertex2f(0.5,2.9);**  **glVertex2f(0,2);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(25, 146, 8);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=4.3-3.5;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-2.3,y+3.5);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(25, 146, 8);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=5.3-4.3;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+0,y+4.3);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(28, 156, 10);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=5-4;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-1.4,y+4);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(28, 156, 10);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=5-4;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+1.5,y+4);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(29, 143, 14);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=4.5-3.5;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x+1,y+3.5);**  **}**  **glEnd();**  **glBegin(GL\_POLYGON);**  **for(int i=0;i<200;i++)**  **{**  **glColor3ub(29, 143, 14);**  **float pi=3.1416;**  **float A=(i\*2\*pi)/200;**  **float r=3.8-3;**  **float x = r \* cos(A);**  **float y = r \* sin(A);**  **glVertex2f(x-1,y+3);**  **}**  **glEnd();**  **}**  **void river()**  **{**  **//river**  **glBegin(GL\_POLYGON);**  **glColor3ub(5, 42, 140);**  **glVertex2f(-10,-5);**  **glVertex2f(-10,-2.9);**  **glVertex2f(10,-2.1);**  **glVertex2f(10,-5);**  **glEnd();**  **//riverside1**  **glBegin(GL\_POLYGON);**  **glColor3ub(120, 94, 5);**  **glVertex2f(-10,-2.5);**  **glVertex2f(-0.9,-2.5);**  **glVertex2f(0,-2.9);**  **glVertex2f(-10,-2.9);**  **glEnd();**  **//riverside2**  **glBegin(GL\_POLYGON);**  **glColor3ub(120, 94, 5);**  **glVertex2f(-0.9,-2.5);**  **glVertex2f(-1.3,-2);**  **glVertex2f(10,-2);**  **glVertex2f(10,-2.5);**  **glEnd();**  **//riverside2**  **glBegin(GL\_POLYGON);**  **glColor3ub(120, 94, 5);**  **glVertex2f(-0.9,-2.5);**  **glVertex2f(-1.3,-2);**  **glVertex2f(-0.4,-2.5);**  **glVertex2f(0,-2.9);**  **glEnd();**  **//boatout**  **glBegin(GL\_POLYGON);**  **glColor3ub(79, 63, 9);**  **glVertex2f(-8,-4.2);**  **glVertex2f(-8.8,-3.2);**  **glVertex2f(-7.5,-3.8);**  **glVertex2f(-5.2,-3.8);**  **glVertex2f(-4,-3.2);**  **glVertex2f(-4.8,-4.2);**  **glEnd();**  **//boatin1**  **glBegin(GL\_POLYGON);**  **glColor3ub(113, 94, 28 );**  **glVertex2f(-7.5,-3.8);**  **glVertex2f(-8.8,-3.2);**  **glVertex2f(-7.5,-3.4);**  **glVertex2f(-6.8,-3.8);**  **glEnd();**  **//boatin2**  **glBegin(GL\_POLYGON);**  **glColor3ub(113, 94, 28 );**  **glVertex2f(-6.8,-3.8);**  **glVertex2f(-7.5,-3.4);**  **glVertex2f(-6,-3.4);**  **glVertex2f(-5.2,-3.8);**  **glEnd();**  **//boatin3**  **glBegin(GL\_POLYGON);**  **glColor3ub(113, 94, 28 );**  **glVertex2f(-5.2,-3.8);**  **glVertex2f(-6,-3.4);**  **glVertex2f(-5.3,-3.4);**  **glVertex2f(-4,-3.2);**  **glEnd();**  **glLineWidth(10);**  **glBegin(GL\_LINES);**  **glColor3ub(136, 114, 40 );**  **glVertex2f(-5.2,-3.8);**  **glVertex2f(-6,-3.4);**  **glEnd();**  **glLineWidth(10);**  **glBegin(GL\_LINES);**  **glColor3ub(136, 114, 40 );**  **glVertex2f(-6.8,-3.8);**  **glVertex2f(-7.6,-3.4);**  **glEnd();**  **glBegin(GL\_POLYGON);**  **glColor3ub( 161, 127, 12 );**  **glVertex2f(-8.3,-3.4);**  **glVertex2f(-8.3,-2);**  **glVertex2f(-8,-2);**  **glVertex2f(-8,-3.6);**  **glEnd();**  **}**  **void display()**  **{**  **glClearColor(1,1,1,1);**  **glClear(GL\_COLOR\_BUFFER\_BIT);**  **farvillage();**  **river();**  **glFlush();**  **}**  **int main(int argc, char\*\* argv)**  **{**  **glutInit(&argc, argv);**  **glutCreateWindow("OpenGL Scenery");**  **glutInitWindowSize(320,320);**  **glutDisplayFunc(display);**  **gluOrtho2D(-10,10,-5,5);**  **glutMainLoop();**  **return 0;**  **}** |
| **Output Screenshot (Full Screen)-**  **\*\*DayVillage**    **\*\*NightVillage** |