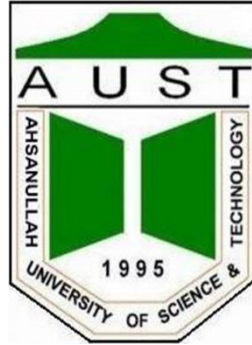# Ahsanullah University of Science and Technology

Department of Computer Science and Engineering

Spring 2018

Course No. : CSE 4204

Course Title: Computer Graphics Lab

Computer Graphics Project

"Shinto Shrine"

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Introduction

Shrine is a sacred place which is dedicated to a specific deity. There are many different types of shrines in Japan. Shinto Shrines are among the most popular types of religious structures in Japan. There are many differences in the two with the most prominent being their use. Many Shinto shrines are said to enshrine a Kami or God. Some shrines are for good grades and luck while others are for overcoming hardship. Not every shrine is dedicated to a Kami; some are for sacred mountains and other areas.

Figure 1: Shinto Shrine of Sumiyoshi Taisha Funatama

Before entering the shrine, one will walk through a Torii gate. The Torii gate symbolizes the entrance from the real world into the spiritual realm and one should lightly bow before entering. One should also avoid walking down the center of the road leading into the shrine, as this path is said to be mainly for the Kami to use.

Figure 2: Torii Gate

Tools

The project has been done on Code Blocks IDE using OpenGL.

Some basic implementations are as below

- Transformation
- Timer
- Color
- Lighting
- Texture
- 3d Text

Feature

The project has the following features:

- Rotation in different orientations
- Use of realistic textures
- Day night environments
- Fog effect implementation
- 3d text display

Obstacles

Finding the proper coordinates to draw can be quite challenging sometimes as the structure is not native.

Future Work

The structure implemented is very simple. It has many more options to be created more realistic through complex designing.

Figure 3: General view of the structure

Figure 4: Night view of the structure

Figure 5: View of the structure in reduced scale

Figure 6: Rotated view of the structure

Figure 7: Foggy view of the structure

Conclusion

The project made many concept clearer than before. Designing an actual structure made us think more to the point and made us aware of the applications of computer graphics. Though our job has been very simple, still it has made us more knowledgeable.

Appendix A: Source code of the project

main.cpp

```cpp
#include<windows.h>
#include <iostream>
#include <stdlib.h>
#ifdef __APPLE__
#include <OpenGL/OpenGL.h>
#include <GLUT/glut.h>
#else
#include <GL/glut.h>
#endif
#include "text3d.h"
#include "imageloader.h"
using namespace std;
int r_count = 0 , s_count = 0 ;
float computeScale(const char* strs[2]) {
        float maxWidth = 0;
        for(int i = 0; i < 2; i++) {
                float width = t3dDrawWidth(strs[i]);
                if (width > maxWidth) {
                        maxWidth = width;
                }
        }

        return 2.6f / maxWidth;
}
float _ang = -30.0f;
float _sca;
int fog_flag = 0 ;
const char* STRS[2] = {"Shinto", "Shrine"};
void cleanup() {
        t3dCleanup();
}
GLfloat s_var = 1;
GLfloat x_ax = 0 , y_ax = 0 , z_ax = 0;
float angle = -5.0f;
float angle2 = 0.0f;
float angle3 = 0.0f;
float posL1=0.1f;
float posL2=0.1f;
float posL3=0.1f;
float R=0,G=0,B=0;
int night = 0;
int timer_flag = 0;
void Light()
{
        GLfloat lightColor0[] = {posL1, posL2, posL3, 1.0f};
        GLfloat lightPos0[] = {0.0f, 8.0f, -8.0f, 1.0f};
        glLightfv(GL_LIGHT0, GL_DIFFUSE, lightColor0);
        glLightfv(GL_LIGHT0, GL_POSITION, lightPos0);
}
void keyboardkey(int key, int x, int y)
{
```

```cpp
        if(key==GLUT_KEY_DOWN)
    {
        R = 1.0;  G = 0.8;  B = 0.5;
        night = 0;


    }
    else if(key==GLUT_KEY_UP)
    {
        R = 0.0;  G = 0.0;  B = 0.0;
        night = 1;


    }
    if(key == GLUT_KEY_RIGHT)
    {
        cout<<angle<<endl;
        if(angle < 193)
        {
            angle+=1.0;
        }
        if(angle > 360.0)
        {
            angle-=360.0;
            cout<<angle<<endl;
        }
    }
    else if(key == GLUT_KEY_LEFT)
    {

        cout<<angle<<endl;
        if(angle > -7)
        {
            angle-=1.0;
        }
        if(angle<0)
        {
            //angle +=360;
            cout<<angle<<endl;
        }
    }


    glutPostRedisplay();

}
void handleKeypress(unsigned char key, int x, int y)
{

    switch (key)
    {
            case 27:
                    exit(0);
    }


    if(key == 's' || key =='S')
    {
```

```
        if(s_count < 9)
        {
            s_count = s_count + 1;
            s_var +=0.05;
        }
        if(r_count >0)
            r_count = r_count-1;
    }

    if(key =='r' || key =='R')
    {


        if(r_count < 9)
        {
            r_count = r_count + 1 ;
            s_var -=0.05;
        }

        if(s_count > 0)
            s_count = s_count - 1 ;
    }
    if(key == 'm' || key =='M')
    {
        angle2 +=1.0;

        if(angle2 > 360.0)
        {
            angle2 -=360.0;
        }
    }
    if(key == 'n' || key =='N')
    {
        angle2 -=1.0;
        if(angle2 <0)
        {
            angle2 +=360;;
        }
    }
    if(key == 'o' || key =='O')
    {
        angle3 +=1.0;

        if(angle3 > 360.0)
        {
            angle3 -=360.0;
        }
    }
    if(key == 'p' || key =='P')
    {
        angle3 -=1.0;
        if(angle3 <0)
        {
            angle3 +=360;;
        }
    }
```

```cpp
    if(key == 'F' || key =='f')
    {
        fog_flag = 1 ;
    }
    if(key == 'G' || key =='g')
    {
        fog_flag = 0 ;
    }
}


GLuint loadTexture(Image* image)
{
        GLuint textureId;
        glGenTextures(1, &textureId);
        glBindTexture(GL_TEXTURE_2D, textureId);
        glTexImage2D(GL_TEXTURE_2D,
                                0,
                                GL_RGB,
                                image->width, image->height,
                                0,
                                GL_RGB,
                                GL_UNSIGNED_BYTE,
                                image->pixels);
        return textureId;
}

GLuint _textureId0, _textureId1, _textureId_t_f_l, _textureId_sh_b,
_textureId_wl, _textureId_roof,  _textureId_door,
        _textureId_window, _textureId_stairs , _textureId_sky,
_textureId_nightsky, _textureId_ground, _textureId_pl;

void initRendering() {
    glClearColor(0.5,0.5,0.5,1);
        glEnable(GL_DEPTH_TEST);
        glEnable(GL_LIGHTING);
        glEnable(GL_LIGHT0);
        glEnable(GL_NORMALIZE);
        glEnable(GL_COLOR_MATERIAL);
        t3dInit();
        glEnable(GL_FOG);



        Image* image0 = loadBMP("grass0.bmp");
        _textureId0 = loadTexture(image0);
        delete image0;

        Image* image1 = loadBMP("r1.bmp");
        _textureId_t_f_l = loadTexture(image1);
        delete image1;

        Image* image2 = loadBMP("rockywall.bmp");
        _textureId_sh_b = loadTexture(image2);
        delete image2;
```

```
        Image* image3 = loadBMP("wall_img.bmp");
        _textureId_wl = loadTexture(image3);
        delete image3;

        Image* image4 = loadBMP("roof.bmp");
        _textureId_roof = loadTexture(image4);
        delete image4;

        Image* image5 = loadBMP("door.bmp");
        _textureId_door = loadTexture(image5);
        delete image5;

        Image* image6 = loadBMP("window.bmp");
        _textureId_window = loadTexture(image6);
        delete image6;

        Image* image7 = loadBMP("stair.bmp");
        _textureId_stairs = loadTexture(image7);
        delete image7;

        Image* image8 = loadBMP("skypic.bmp");
        _textureId_sky = loadTexture(image8);
        delete image8;

        Image* image9 = loadBMP("night.bmp");
        _textureId_nightsky = loadTexture(image9);
        delete image9;

        Image* image10 = loadBMP("ground.bmp");
        _textureId_ground = loadTexture(image10);
        delete image10;

        Image* image11 = loadBMP("wwod.bmp");
        _textureId_pl = loadTexture(image11);
        delete image11;


}

void handleResize(int w, int h) {
        glViewport(0, 0, w, h);
        glMatrixMode(GL_PROJECTION);
        glLoadIdentity();
        gluPerspective(45.0, (float)w / (float)h, 1.0, 200.0);
}

void drawScene() {
        glClear(GL_COLOR_BUFFER_BIT | GL_DEPTH_BUFFER_BIT);
        glClearColor(R,G,B,1);
        glMatrixMode(GL_MODELVIEW);
    glLoadIdentity();


    GLfloat fogColor[] = {0.5f, 0.5f, 0.5f, 1.0};
    glFogfv(GL_FOG_COLOR, fogColor);
    glFogi(GL_FOG_MODE, GL_LINEAR);
    glFogf(GL_FOG_START, 5.0f);
```

```cpp
if(fog_flag == 1)
{
    glEnable(GL_FOG);
    GLfloat fogColor[] = {0.5f, 0.5f, 0.5f, 1.0};
    glFogfv(GL_FOG_COLOR, fogColor);
    glFogi(GL_FOG_MODE, GL_LINEAR);
    glFogf(GL_FOG_START, 5.0f);
    glFogf(GL_FOG_END, 26.0f);
    glFogf(GL_FOG_DENSITY, 0.05f);
}

if(fog_flag == 0)
{
    glDisable(GL_FOG);
}




Light();


    glTranslatef(0.0f, 1.0f, -15.0f);
    glScalef(s_var,s_var,s_var);


    glEnable(GL_TEXTURE_2D);

    if(night == 1)
{
    glBindTexture(GL_TEXTURE_2D, _textureId_nightsky);
}
else if(night == 0)
{
    glBindTexture(GL_TEXTURE_2D, _textureId_sky);
}

glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_NEAREST);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_NEAREST);

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-30.5f, -20.5f, -9.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(30.5f, -20.5f, -9.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(30.5f, 20.5f, -9.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-30.5f, 20.5f, -9.5f);
glEnd();

glRotatef(angle,1.0, 0.0f, 0.0f);
glRotatef(angle2,0.0, 1.0f, 0.0f);
```

```
glBindTexture(GL_TEXTURE_2D, _textureId0);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_NEAREST);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_NEAREST);

    glBegin(GL_QUADS);
    glNormal3f(0.0, 1.0f, 0.0f);
    glTexCoord2f(0.0f, 0.0f);
    glVertex3f(-6.5f, -4.5f, 2.5f);
    glTexCoord2f(1.0f, 0.0f);
    glVertex3f(6.5f, -4.5f, 2.5f);
    glTexCoord2f(1.0f, 1.0f);
    glVertex3f(6.5f, -4.5f, -8.5f);
    glTexCoord2f(0.0f, 1.0f);
    glVertex3f(-6.5f, -4.5f, -8.5f);
    glEnd();

glBindTexture(GL_TEXTURE_2D, _textureId_stairs);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_NEAREST);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_NEAREST);

     glBegin(GL_QUADS);
    glNormal3f(0.0, 0.0f, 1.0f);
    glTexCoord2f(0.0f, 0.0f);
    glVertex3f(-6.5f, -5.0f, 2.5f);
    glTexCoord2f(1.0f, 0.0f);
    glVertex3f(6.5f, -5.0f, 2.5f);
    glTexCoord2f(1.0f, 1.0f);
    glVertex3f(6.5f, -4.5f, 2.5f);
    glTexCoord2f(0.0f, 1.0f);
    glVertex3f(-6.5f, -4.5f, 2.5f);
    glEnd();

    glBegin(GL_QUADS);
    glNormal3f(0.0, 0.0f, -1.0f);
    glTexCoord2f(0.0f, 0.0f);
    glVertex3f(-6.5f, -6.2f, -8.5f);
    glTexCoord2f(1.0f, 0.0f);
    glVertex3f(6.5f, -6.2f, -8.5f);
    glTexCoord2f(1.0f, 1.0f);
    glVertex3f(6.5f, -4.5f, -8.5f);
    glTexCoord2f(0.0f, 1.0f);
    glVertex3f(-6.5f, -4.5f, -8.5f);
    glEnd();

    glBegin(GL_QUADS);
    glNormal3f(1.0, 0.0f, 0.0f);
    glTexCoord2f(0.0f, 0.0f);
    glVertex3f(6.5f, -5.0f, 2.5f);
    glTexCoord2f(1.0f, 0.0f);
    glVertex3f(6.5f, -5.0f, -8.5f);
    glTexCoord2f(1.0f, 1.0f);
    glVertex3f(6.5f, -4.5f, -8.5f);
    glTexCoord2f(0.0f, 1.0f);
    glVertex3f(6.5f, -4.5f, 2.5f);
    glEnd();
```

```
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-6.5f, -5.0f, 2.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-6.5f, -5.0f, -8.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-6.5f, -4.5f, -8.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-6.5f, -4.5f, 2.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-6.5f, -5.5f, 3.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(6.5f, -5.5f, 3.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(6.5f, -5.0f, 3.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-6.5f, -5.0f, 3.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(6.5f, -5.5, 3.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(6.5f, -5.5f, -8.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(6.5f, -5.0f, -8.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(6.5f, -5.0f, 3.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-6.5f, -5.5, 3.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-6.5f, -5.5f, -8.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-6.5f, -5.0f, -8.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-6.5f, -5.0f, 3.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-6.5f, -6.0, 3.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(6.5f, -6.0f, 3.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(6.5f, -5.5f, 3.5f);
glTexCoord2f(0.0f, 1.0f);
```

```
glVertex3f(-6.5f, -5.5f, 3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(6.5f, -6.0, 3.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(6.5f, -6.0f, -8.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(6.5f, -5.5f, -8.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(6.5f, -5.5f, 3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-6.5f, -6.0, 3.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-6.5f, -6.0f, -8.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-6.5f, -5.5f, -8.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-6.5f, -5.5f, 3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-6.5f, -6.2, 4.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(6.5f, -6.2f, 4.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(6.5f, -6.0f, 4.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-6.5f, -6.0f, 4.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(6.5f, -6.2, 4.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(6.5f, -6.2f, -8.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(6.5f, -6.0f, -8.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(6.5f, -6.0f, 4.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-6.5f, -6.2, 4.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-6.5f, -6.2f, -8.5f);
```

```
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(-6.5f, -6.0f, -8.5f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(-6.5f, -6.0f, 4.0f);
        glEnd();

        glBegin(GL_QUADS);
        glNormal3f(0.0, 1.0f, 0.0f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(-6.5f, -5.0f, 3.0f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(6.5f, -5.0f, 3.0f);
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(6.5f, -5.0f, -8.5f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(-6.5f, -5.0f, -8.5f);
        glEnd();

        glBegin(GL_QUADS);
        glNormal3f(0.0, 1.0f, 0.0f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(-6.5f, -5.5f, 3.5f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(6.5f, -5.5f, 3.5f);
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(6.5f, -5.5f, -8.5f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(-6.5f, -5.5f, -8.5f);
        glEnd();

        glBegin(GL_QUADS);
        glNormal3f(0.0, 1.0f, 0.0f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(-6.5f, -6.0f, 4.0f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(6.5f, -6.0f, 4.0f);
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(6.5f, -6.0f, -8.5f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(-6.5f, -6.0f, -8.5f);
        glEnd();

    glBindTexture(GL_TEXTURE_2D, _textureId0);
    glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_NEAREST);
    glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_NEAREST);

        glBegin(GL_QUADS);
        glNormal3f(0.0, 1.0f, 0.0f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(-100.5f, -6.2f, 100.0f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(100.5f, -6.2f, 100.0f);
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(100.5f, -6.2f, -100.5f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(-100.5f, -6.2f, -100.5f);
        glEnd();
```

```
glBindTexture(GL_TEXTURE_2D, _textureId_t_f_l);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
 glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);

glColor3f(1.0f, 0.0f, 0.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.5f, -4.5f, 1.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.0f, -4.5f, 1.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.0f, .5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.5f, .5f, 1.5f);
glEnd();

glColor3f(1.0f, 0.0f, 0.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, -1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.5f, -4.5f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.0f, -4.5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.0f, .5f, 1.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.5f, .5f, 1.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.5f, .5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.0f, .5f, 1.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.0f, .5f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.5f, .5f, 1.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(-1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.5f, -4.5f, 1.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.5f, -4.5f, 1.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.5f, 0.5f, 1.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.5f, .5f, 1.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
```

```
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.0f, -4.5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.0f, -4.5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.0f, 0.5f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.0f, .5f, 1.5f);
glEnd();

glColor3f(1.0f, 0.0f, 0.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.5f, -4.5f, 1.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.0f, -4.5f, 1.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.0f, .5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.5f, .5f, 1.5f);
glEnd();

glColor3f(1.0f, 0.0f, 0.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, -1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.5f, -4.5f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.0f, -4.5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.0f, .5f, 1.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.5f, .5f, 1.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.5f, .5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.0f, .5f, 1.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.0f, .5f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.5f, .5f, 1.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(-1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.5f, -4.5f, 1.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.5f, -4.5f, 1.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.5f, 0.5f, 1.5f);
glTexCoord2f(0.0f, 1.0f);
```

```
glVertex3f(2.5f, .5f, 1.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.0f, -4.5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.0f, -4.5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.0f, 0.5f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.0f, .5f, 1.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.f, .5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.f, .5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.f, .5f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.f, .5f, 1.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.5f, 0.7f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.5f, 0.7f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, 0.7f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.5f, 0.7f, 1.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, 0.0f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.2f, 0.0f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.2f, 0.0f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, 0.0f, 1.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.0f, 0.5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.0f, 0.5f, 1.5f);
```

```
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, 0.7f, 1.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.5f, 0.7f, 1.5f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.0f, 0.5f, 1.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.0f, 0.5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, 0.7f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.5f, 0.7f, 1.0f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.0f, .5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.0f, .5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, 0.7f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.5f, 0.7f, 1.5f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.0f, .5f, 1.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.0f, .5f, 1.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.5f, 0.7f, 1.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.5f, 0.7f, 1.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -3.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -3.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -3.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -3.6f);
```

```
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -3.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -3.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -3.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -3.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -3.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -3.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -3.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -2.0f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -2.0f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -3.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -3.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -5.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -5.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
```

```
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -5.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -5.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -5.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -5.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -5.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -5.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -2.0f, -5.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -2.0f, -5.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -5.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -5.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -7.4f);
```

```
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -7.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -7.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
```

```
glVertex3f(5.0f, -2.0f, -3.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -3.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -3.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -3.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -3.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -3.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -3.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -3.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -3.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -3.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -3.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -2.0f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -2.0f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -3.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -3.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
```

```
glVertex3f(5.2f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -5.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -5.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -5.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -5.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -5.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -5.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -5.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -5.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -5.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -5.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -2.0f, -5.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -2.0f, -5.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -5.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -5.6f);
glEnd();
```

```
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -7.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -7.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.0f, -2.0f, -7.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
```

```
glVertex3f(5.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.0f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, -2.0f, -7.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, -2.0f, -7.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.0f, -2.0f, -7.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.2f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
```

```
glVertex3f(3.2f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.0f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.0f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -2.0f, -7.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -2.0f, -7.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.0f, -2.0f, -7.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.2f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -2.0f, -7.6f);
glEnd();
```

```
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.0f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(0.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(0.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(0.0f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(0.2f, -2.0f, -7.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(0.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(0.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(0.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(0.2f, -2.0f, -7.6f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(0.0f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(0.0f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(0.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(0.0f, -2.0f, -7.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(0.2f, -4.5f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(0.2f, -4.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
```

```
glVertex3f(0.2f, -2.0f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(0.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(0.2f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(0.0f, -2.0f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(0.0f, -2.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(0.2f, -2.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -2.5f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -2.5f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -2.5f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.5f, -7.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
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glVertex3f(-5.2f, -3.0f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -3.0f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -3.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -3.0f, -7.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -3.0f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.2f, -3.0f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.2f, -2.5f, -3.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -2.5f, -7.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, .0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.0f, -3.0f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -3.0f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
```

```
glVertex3f(-5.0f, -2.5f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.0f, -2.5f, -3.4f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -3.5f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -3.5f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -3.5f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -3.5f, -7.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.0f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
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glTexCoord2f(1.0f, 1.0f);
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glBegin(GL_QUADS);
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glTexCoord2f(1.0f, 0.0f);
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glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, .0f, 0.0f);
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glVertex3f(-5.0f, -4.0f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-5.0f, -4.0f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-5.0f, -3.5f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.0f, -3.5f, -3.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -2.5f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -2.5f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -2.5f, -7.6f);
```

```
glTexCoord2f(0.0f, 1.0f);
glVertex3f(5.2f, -2.5f, -7.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -3.0f, -3.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.0f, -3.0f, -3.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.0f, -3.0f, -7.6f);
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glEnd();
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glTexCoord2f(1.0f, 0.0f);
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glTexCoord2f(1.0f, 1.0f);
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glTexCoord2f(0.0f, 1.0f);
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```

```
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(5.2f, -4.0f, -7.6f);
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glTexCoord2f(1.0f, 1.0f);
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glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -2.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -2.5f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
```

```
glVertex3f(-5.2f, -2.5f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -3.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -3.0f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -3.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -3.0f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -4.0f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -3.5f, -7.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -3.5f, -7.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.0f, -7.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -4.0f, -7.6f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -3.5f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -3.5f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -3.5f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -3.5f, -7.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -3.5f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -3.5f, -7.6f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-5.2f, -4.0f, -7.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(5.2f, -4.0f, -7.4f);
```

```
glTexCoord2f(1.0f, 1.0f);
glVertex3f(5.2f, -4.0f, -7.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-5.2f, -4.0f, -7.6f);
glEnd();

glBindTexture(GL_TEXTURE_2D, _textureId_pl);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
 glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.4f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.0f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-4.0f, -2.0f, -2.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.4f, -2.0f, -2.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.4f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.0f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-4.0f, -2.0f, -2.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.4f, -2.0f, -2.4f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.0f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.0f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-4.0f, -2.0f, -2.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.0f, -2.0f, -2.0f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.4f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.4f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-4.4f, -2.0f, -2.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.4f, -2.0f, -2.4f);
glEnd();
```

```
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.4f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.0f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-4.0f, -2.0f, -2.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.4f, -2.0f, -2.4f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.7f, -1.0f, -1.8f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.7f, -1.0f, -1.8f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.7f, -1.0f, -2.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.7f, -1.0f, -2.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.4f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.0f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.7f, -1.0f, -1.8f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.7f, -1.0f, -1.8f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.4f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.0f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.7f, -1.0f, -2.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.7f, -1.0f, -2.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.0f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.0f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.7f, -1.0f, -2.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.7f, -1.0f, -1.8f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
```

```
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.4f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.4f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-4.7f, -1.0f, -1.8f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-4.7f, -1.0f, -2.6f);
glEnd();

glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.7f, -1.0f, -1.8f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.7f, -1.0f, -1.8f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(-4.2f, -0.5f, -2.2f);
glEnd();
glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.7f, -1.0f, -2.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.7f, -1.0f, -2.6f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(-4.2f, -0.5f, -2.2f);
glEnd();
glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-4.7f, -1.0f, -2.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-4.7f, -1.0f, -1.8f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(-4.2f, -0.5f, -2.2f);
glEnd();
glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.7f, -1.0f, -1.8f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.7f, -1.0f, -2.6f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(-4.2f, -0.5f, -2.2f);
glEnd();

glBindTexture(GL_TEXTURE_2D, _textureId_pl);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
 glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.4f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.0f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
```

```
glVertex3f(4.0f, -2.0f, -2.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.4f, -2.0f, -2.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.4f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.0f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(4.0f, -2.0f, -2.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.4f, -2.0f, -2.4f);
glEnd();

glColor3f(1,1,1);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.0f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.0f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(4.0f, -2.0f, -2.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.0f, -2.0f, -2.0f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.4f, -4.5f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.4f, -4.5f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(4.4f, -2.0f, -2.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.4f, -2.0f, -2.4f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.4f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.0f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(4.0f, -2.0f, -2.4f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.4f, -2.0f, -2.4f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.7f, -1.0f, -1.8f);
```

```
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.7f, -1.0f, -1.8f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.7f, -1.0f, -2.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.7f, -1.0f, -2.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.4f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.0f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.7f, -1.0f, -1.8f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.7f, -1.0f, -1.8f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.4f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.0f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.7f, -1.0f, -2.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.7f, -1.0f, -2.6f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.0f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.0f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.7f, -1.0f, -2.6f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.7f, -1.0f, -1.8f);
glEnd();
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.4f, -2.0f, -2.4f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.4f, -2.0f, -2.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(4.7f, -1.0f, -1.8f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(4.7f, -1.0f, -2.6f);
glEnd();

glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.7f, -1.0f, -1.8f);
glTexCoord2f(1.0f, 0.0f);
```

```
glVertex3f(3.7f, -1.0f, -1.8f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(4.2f, -0.5f, -2.2f);
glEnd();
glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.7f, -1.0f, -2.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.7f, -1.0f, -2.6f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(4.2f, -0.5f, -2.2f);
glEnd();
glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(4.7f, -1.0f, -2.6f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(4.7f, -1.0f, -1.8f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(4.2f, -0.5f, -2.2f);
glEnd();
glBegin(GL_TRIANGLES);
glNormal3f(1.0, 1.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.7f, -1.0f, -1.8f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.7f, -1.0f, -2.6f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(4.2f, -0.5f, -2.2f);
glEnd();




glBindTexture(GL_TEXTURE_2D, _textureId_sh_b);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);

glColor3f(6.0f, 6.0f, 6.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.5f, -4.0f, -3.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.5f, -4.0f, -3.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, -4.0f, -7.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.5f, -4.0f, -7.0f);
glEnd();

glColor3f(6.0f, 6.0f, 6.0f);
glBegin(GL_QUADS);
```

```
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.5f, -4.5f, -3.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.5f, -4.5f, -3.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, -4.0f, -3.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.5f, -4.0f, -3.0f);
glEnd();

glColor3f(6.0f, 6.0f, 6.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.5f, -4.5f, -7.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.5f, -4.5f, -7.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, -4.0f, -7.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.5f, -4.0f, -7.0f);
glEnd();

glColor3f(6.0f, 6.0f, 6.0f);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.5f, -4.5f, -7.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.5f, -4.5f, -3.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.5f, -4.0f, -3.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.5f, -4.0f, -7.0f);
glEnd();


 glColor3f(6.0f, 6.0f, 6.0f);
glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.5f, -4.5f, -7.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.5f, -4.5f, -3.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.5f, -4.0f, -3.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.5f, -4.0f, -7.0f);
glEnd();

glBindTexture(GL_TEXTURE_2D, _textureId_wl);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);

glColor3f(0.4f, 0.5f, 0.7f);
```

```
glBegin(GL_QUADS);
glNormal3f(0.0, .0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.9f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.9f, -3.0f, -3.3f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -3.0f, -3.3f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -4.0f, -4.2f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.2f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-3.2f, -3.0f, -3.3f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -3.0f, -4.2f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.9f, -4.0f, -4.2f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.9f, -4.0f, -3.3f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.9f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.9f, -3.0f, -4.2f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.9f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.9f, -3.0f, -4.2f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -3.0f, -4.2f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.9f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-1.0f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-1.0f, -3.0f, -3.3f);
```

```
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.9f, -3.0f, -3.3f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.9f, -4.0f, -3.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-1.0f, -4.0f, -3.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-1.0f, -3.0f, -3.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.9f, -3.0f, -3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-2.9f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-1.0f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-1.0f, -3.0f, -3.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-2.9f, -3.0f, -3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-1.0f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-1.0f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-1.0f, -4.0f, -3.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-1.0f, -3.0f, -3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, .0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.2f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.9f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.9f, -3.0f, -3.3f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, -3.0f, -3.3f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.2f, -4.0f, -4.2f);
glTexCoord2f(1.0f, 0.0f);
```

```
glVertex3f(3.2f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.2f, -3.0f, -3.3f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, -3.0f, -4.2f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.9f, -4.0f, -4.2f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.9f, -4.0f, -3.3f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.9f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.9f, -3.0f, -4.2f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(3.2f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.9f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.9f, -3.0f, -4.2f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(3.2f, -3.0f, -4.2f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.9f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(1.0f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(1.0f, -3.0f, -3.3f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.9f, -3.0f, -3.3f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.9f, -4.0f, -3.5f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(1.0f, -4.0f, -3.5f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(1.0f, -3.0f, -3.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.9f, -3.0f, -3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
```

```
glTexCoord2f(0.0f, 0.0f);
glVertex3f(2.9f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(1.0f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(1.0f, -3.0f, -3.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(2.9f, -3.0f, -3.5f);
glEnd();

glBegin(GL_QUADS);
glNormal3f(1.0, 0.0f, 0.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(1.0f, -3.0f, -3.3f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(1.0f, -4.0f, -3.3f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(1.0f, -4.0f, -3.5f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(1.0f, -3.0f, -3.5f);
glEnd();

glColor3f(1.0f, 1.0f, 1.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -4.0f, -4.2f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.2f, -4.0f, -4.2f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.2f, -0.5f, -4.2f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -0.5f, -4.2f);
glEnd();


glBegin(GL_TRIANGLES);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -0.5f, -4.2f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.2f, -0.5f, -4.2f);
glTexCoord2f(0.5f, 0.5f);
glVertex3f(0.0f, 0.4f, -4.2f);
glEnd();


glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.2f, -4.0f, -6.8f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(3.2f, -4.0f, -6.8f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(3.2f, -0.5f, -6.8f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-3.2f, -0.5f, -6.8f);
```

```
        glEnd();


        glBegin(GL_TRIANGLES);
        glNormal3f(0.0, 0.0f, 1.0f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(-3.2f, -0.5f, -6.8f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(3.2f, -0.5f, -6.8f);
        glTexCoord2f(0.5f, 0.5f);
        glVertex3f(0.0f, 0.4f, -6.8f);
        glEnd();


        glColor3f(2.0f, 2.0f, 2.0f);
        glBegin(GL_QUADS);
        glNormal3f(1.0, 1.0f, 0.0f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(3.2f, -4.0f, -4.2f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(3.2f, -4.0f, -6.8f);
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(3.2f, -0.5f, -6.8f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(3.2f, -0.5f, -4.2f);
        glEnd();

        glColor3f(2.0f, 2.0f, 2.0f);
        glBegin(GL_QUADS);
        glNormal3f(1.0, 1.0f, 0.0f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(-3.2f, -4.0f, -4.2f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(-3.2f, -4.0f, -6.8f);
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(-3.2f, -0.5f, -6.8f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(-3.2f, -0.5f, -4.2f);
        glEnd();

        glBindTexture(GL_TEXTURE_2D, _textureId_roof);
        glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
         glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);

        glColor3f(2.0f, 2.0f, 2.0f);
        glBegin(GL_QUADS);
        glNormal3f(0.0, 1.0f, 0.0f);
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(0.0f, 0.4f, -3.0f);
        glTexCoord2f(1.0f, 1.0f);
        glVertex3f(0.0f, 0.4f, -6.8f);
        glTexCoord2f(1.0f, 0.0f);
        glVertex3f(3.5f, -.6f, -6.8f);
        glTexCoord2f(0.0f, 0.0f);
        glVertex3f(3.5f, -.6f, -3.0f);
        glEnd();
```

```
glColor3f(2.0f, 2.0f, 2.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 1.0f, 0.0f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(0.0f, 0.4f, -3.0f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(0.0f, 0.4f, -6.8f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-3.5f, -.6f, -6.8f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-3.5f, -.6f, -3.0f);
glEnd();

glBindTexture(GL_TEXTURE_2D, _textureId_door);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
 glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);

glColor3f(2.0f, 2.0f, 2.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-1.0f, -4.0f, -4.19f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(1.0f, -4.0f, -4.19f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(1.0f, -1.0f, -4.19f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(-1.0f, -1.0f, -4.19f);
glEnd();

glBindTexture(GL_TEXTURE_2D, _textureId_window);
glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
 glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);


glColor3f(2.0f, 2.0f, 2.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(1.7f, -1.5f, -4.19f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(2.5f, -1.5f, -4.19f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(2.5f, -0.8f, -4.19f);
glTexCoord2f(0.0f, 1.0f);
glVertex3f(1.7f, -0.8f, -4.19f);
glEnd();

glColor3f(2.0f, 2.0f, 2.0f);
glBegin(GL_QUADS);
glNormal3f(0.0, 0.0f, 1.0f);
glTexCoord2f(0.0f, 0.0f);
glVertex3f(-1.7f, -1.5f, -4.19f);
glTexCoord2f(1.0f, 0.0f);
glVertex3f(-2.5f, -1.5f, -4.19f);
glTexCoord2f(1.0f, 1.0f);
glVertex3f(-2.5f, -0.8f, -4.19f);
```

```cpp
        glTexCoord2f(0.0f, 1.0f);
        glVertex3f(-1.7f, -0.8f, -4.19f);
        glEnd();

        glRotatef(-_ang, 0.0f, 1.0f, 0.0f);
        glScalef(_sca, _sca, _sca);

        for(int i = 0; i < 2; i++) {

                glPushMatrix();
                glRotatef(90 * i, 0, 1, 0);
                glTranslatef(0, 5, 2.0f / _sca);
                t3dDraw3D(STRS[i], 0, 0, 0.1f);
                glPopMatrix();
        }

        glutSwapBuffers();
}


void update(int value) {
        _ang += 1.5f;
        if (_ang > 360) {
                _ang -= 360;
        }

        glutPostRedisplay();
        glutTimerFunc(25, update, 0);
}

int main(int argc, char** argv) {
        glutInit(&argc, argv);
        glutInitDisplayMode(GLUT_DOUBLE | GLUT_RGB | GLUT_DEPTH);
        glutInitWindowSize(1200, 600);

        R = 1.0; G = 0.8; B = 0.5;
        glutCreateWindow("Shinto Shrine");
        initRendering();
        _sca = computeScale(STRS);

        glutDisplayFunc(drawScene);
        glutKeyboardFunc(handleKeypress);
        glutReshapeFunc(handleResize);

        glutSpecialFunc(keyboardkey);
        cout<<angle<<endl;
        timer(0);

        glutTimerFunc(25, update, 0);

        glutMainLoop();
        return 0;
}
```