#include<windows.h>

#include<mmsystem.h>

#include<math.h>

#include<cstdio>

#include <GL/gl.h>

#include <GL/glut.h>

#define PI 3.14159265358979323846

GLfloat positionCar1 = 0.0f;

GLfloat speedCar1 = 0.02f;

GLfloat positionCloud = 0.0f;

GLfloat speedCloud = 0.00099f;

GLfloat positionSun = 0.0f;

GLfloat speedSun = 0.004f;

GLfloat positionMoon = 0.0f;

GLfloat speedMoon = 0.0009f;

GLfloat positionBird = 0.0f;

GLfloat speedBird = 0.003f;

void updateCar1(int value) // Where and how to move

{

if(positionCar1 > 5.0)

positionCar1 = 0.0f;

positionCar1 += speedCar1;

glutPostRedisplay();

glutTimerFunc(1, updateCar1, 0);

}

void updateCloud(int value) // Where and how to move

{

if(positionCloud <-5.0)

positionCloud = 6.0f;

positionCloud -= speedCloud;

glutPostRedisplay();

glutTimerFunc(1, updateCloud, 0);

}

void updateSun(int value) // Where and how to move

{

if(positionSun <-4.0)

positionSun = 4.0f;

positionSun -= speedSun;

glutPostRedisplay();

glutTimerFunc(1, updateSun, 0);

}

void updateMoon(int value) // Where and how to move

{

if(positionMoon >4.0)

positionMoon = -1.5f;

positionMoon += speedMoon;

glutPostRedisplay();

glutTimerFunc(1, updateMoon, 0);

}

void updateBird(int value) // Where and how to move

{

if(positionBird >4.0)

positionBird = -1.5f;

positionBird += speedBird;

glutPostRedisplay();

glutTimerFunc(1, updateBird, 0);

}

void soundMorning()

{

PlaySound("Morning-sounds.wav", NULL,SND\_ASYNC|SND\_FILENAME|SND\_LOOP);

}

void soundNight()

{

PlaySound("Night-sounds.wav", NULL,SND\_ASYNC|SND\_FILENAME|SND\_LOOP);

}

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

{

switch (key)

{

case ' ':

if(speedCar1== 0.0f)

{

speedCar1 = 0.1f;

break;

}else

speedCar1= 0.0f;

break;

case 'm':

sndPlaySound(NULL,SND\_ASYNC);

sndPlaySound("Morning-sounds.wav",SND\_ASYNC|SND\_LOOP);

break;

case 'n':

sndPlaySound(NULL,SND\_ASYNC);

sndPlaySound("Night-sounds.wav",SND\_ASYNC|SND\_LOOP);

break;

case 's':

speedCloud = 0.0f;

break;

default:

break;

glutPostRedisplay();

}

}

void handleMouse(int button, int state, int x, int y)

{

if (button == GLUT\_LEFT\_BUTTON)

{

speedCloud = 0.08f;

}

if (button == GLUT\_RIGHT\_BUTTON)

{

speedCloud = 0.03f;

}

glutPostRedisplay();

}

///Night

void myDisplayNight(void)

{

glClearColor(1.0f, 1.0f, 1.0f, 0.0f);

glClear(GL\_COLOR\_BUFFER\_BIT);

glLoadIdentity();

gluOrtho2D(-5,5,-4,4);

///sky

glEnable(GL\_LIGHTING);//Enable Light Effect

GLfloat global\_ambient[] = {0.0,0.0,2.0, 0.1};//ambient RGBA intensity of light

glLightModelfv(GL\_LIGHT\_MODEL\_AMBIENT, global\_ambient);

glColor3ub(25,25,112);

glBegin(GL\_QUADS);

glVertex2f(-5,4);

glVertex2f(-5,0);

glVertex2f(5,0);

glVertex2f(5,4);

glEnd();

glDisable(GL\_LIGHTING);

///Moon

glPushMatrix();

glTranslatef(0.0f,positionMoon, 0.0f);

int i1;

GLfloat x1=-1.0; GLfloat y1=1.0; GLfloat radius1 =.4f;

int triangleAmount = 100; //# of triangles used to draw circle

GLfloat twicePi = 2.0f \* PI;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(255,255,230);

glVertex2f(x1, y1); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x1 + (radius1 \* cos(i1 \* twicePi / triangleAmount)),

y1 + (radius1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

glPopMatrix();

///clouds

glPushMatrix();

glTranslatef(positionCloud,0.0, 0.0f);

GLfloat global\_ambient2[] = {3.5,3.5,3.5, 0.1};//ambient RGBA intensity of light

glLightModelfv(GL\_LIGHT\_MODEL\_AMBIENT, global\_ambient2);

GLfloat x2=-2.5; GLfloat y2=3.5; GLfloat radius2 =.3f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191, 191, 191);

glVertex2f(x2, y2); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x2 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y2 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x3=-2.9; GLfloat y3=3.3;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191, 191, 191);

glVertex2f(x3, y3); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x3 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y3 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x4=-2.65; GLfloat y4=2.95;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191, 191, 191);

glVertex2f(x4, y4); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x4 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y4 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x5=2; GLfloat y5=3.4;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191, 191, 191);

glVertex2f(x5, y5); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x5 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y5 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x6=2.26; GLfloat y6=3.04;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191, 191, 191);

glVertex2f(x6, y6); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x6 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y6 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x7=1.8; GLfloat y7=3;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191, 191, 191);

glVertex2f(x7, y7); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x7 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y7 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x8=-2.2; GLfloat y8=3.2;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191,191,191);

glVertex2f(x8, y8); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x8 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y8 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x9=1.6; GLfloat y9=3.4;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(191, 191, 191);

glVertex2f(x9, y9); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x9 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y9 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

glDisable(GL\_LIGHTING);

glPopMatrix();

///Tree

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-0.15,2.1);

glVertex2f(-0.15,1.5);

glVertex2f(-0.05,1.5);

glVertex2f(-0.05,2.1);

glVertex2f(-0.15,2.1);

glEnd();

GLfloat xt1=-0.3; GLfloat yt1=2.1; GLfloat radiust1 =.2f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt1, yt1); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt1 + (radiust1 \* cos(i1 \* twicePi / triangleAmount)),

yt1 + (radiust1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt2=-0.1; GLfloat yt2=2.3;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt2, yt2); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt2 + (radiust1 \* cos(i1 \* twicePi / triangleAmount)),

yt2 + (radiust1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt3=0.1; GLfloat yt3=2.1;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt3, yt3); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt3 + (radiust1 \* cos(i1 \* twicePi / triangleAmount)),

yt3 + (radiust1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

///Tree2

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(0.65,2.1);

glVertex2f(0.65,1.5);

glVertex2f(0.55,1.5);

glVertex2f(0.55,2.1);

glVertex2f(0.65,2.1);

glEnd();

GLfloat xt4=0.4; GLfloat yt4=2.0; GLfloat radiust2 =.2f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt4, yt4); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt4 + (radiust2 \* cos(i1 \* twicePi / triangleAmount)),

yt4 + (radiust2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt5=0.6; GLfloat yt5=2.2;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt5, yt5); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt5 + (radiust2 \* cos(i1 \* twicePi / triangleAmount)),

yt5 + (radiust2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt6=0.8; GLfloat yt6=2.0;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt6, yt6); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt6 + (radiust2 \* cos(i1 \* twicePi / triangleAmount)),

yt6 + (radiust2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

///Tree3

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-0.75,2.1);

glVertex2f(-0.75,1.5);

glVertex2f(-0.65,1.5);

glVertex2f(-0.65,2.1);

glVertex2f(-0.75,2.1);

glEnd();

GLfloat xt7=-0.5; GLfloat yt7=2.0; GLfloat radiust3 =.2f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt7, yt7); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt7 + (radiust3 \* cos(i1 \* twicePi / triangleAmount)),

yt7 + (radiust3 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt8=-0.7; GLfloat yt8=2.2;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt8, yt8); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt8 + (radiust3 \* cos(i1 \* twicePi / triangleAmount)),

yt8 + (radiust3 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt9=-0.9; GLfloat yt9=2.0;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt9, yt9); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt9 + (radiust3 \* cos(i1 \* twicePi / triangleAmount)),

yt9 + (radiust3 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

///Tree 4

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(2.85,1.8);

glVertex2f(2.85,1.2);

glVertex2f(2.95,1.2);

glVertex2f(2.95,1.8);

glVertex2f(2.85,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(2.55,1.7);

glVertex2f(2.90,1.9);

glVertex2f(3.25,1.7);

glVertex2f(2.65,1.7);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(2.6,1.8);

glVertex2f(2.90,2.0);

glVertex2f(3.2,1.8);

glVertex2f(2.6,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(2.65,1.9);

glVertex2f(2.90,2.1);

glVertex2f(3.15,1.9);

glVertex2f(2.65,1.9);

glEnd();

///Tree5

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-2.85,1.8);

glVertex2f(-2.85,1.2);

glVertex2f(-2.95,1.2);

glVertex2f(-2.95,1.8);

glVertex2f(-2.85,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-2.55,1.7);

glVertex2f(-2.90,1.9);

glVertex2f(-3.25,1.7);

glVertex2f(-2.55,1.7);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-2.6,1.8);

glVertex2f(-2.90,2.0);

glVertex2f(-3.2,1.8);

glVertex2f(-2.6,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-2.65,1.9);

glVertex2f(-2.90,2.1);

glVertex2f(-3.15,1.9);

glVertex2f(-2.65,1.9);

glEnd();

///Tree 6

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(3.55,1.8);

glVertex2f(3.55,1.2);

glVertex2f(3.65,1.2);

glVertex2f(3.65,1.8);

glVertex2f(3.55,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(3.25,1.65);

glVertex2f(3.60,1.85);

glVertex2f(3.95,1.65);

glVertex2f(3.25,1.65);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(3.3,1.75);

glVertex2f(3.60,1.95);

glVertex2f(3.9,1.75);

glVertex2f(3.3,1.75);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(3.35,1.85);

glVertex2f(3.60,2.05);

glVertex2f(3.85,1.85);

glVertex2f(3.35,1.85);

glEnd();

///Tree 7

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-3.55,1.8);

glVertex2f(-3.55,1.2);

glVertex2f(-3.65,1.2);

glVertex2f(-3.65,1.8);

glVertex2f(-3.55,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.25,1.65);

glVertex2f(-3.60,1.85);

glVertex2f(-3.95,1.65);

glVertex2f(-3.25,1.65);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.3,1.75);

glVertex2f(-3.60,1.95);

glVertex2f(-3.9,1.75);

glVertex2f(-3.3,1.75);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.35,1.85);

glVertex2f(-3.60,2.05);

glVertex2f(-3.85,1.85);

glVertex2f(-3.35,1.85);

glEnd();

///Field

glColor3ub(11,112,24);

glBegin(GL\_POLYGON);

glVertex2f(-5,0);

glVertex2f(5,0);

glVertex2f(5,-4);

glVertex2f(-5,-4);

glVertex2f(-5,0);

glEnd();

///Mosque

///center Structure

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4,0);

glVertex2f(-4,1);

glVertex2f(0,1.3);

glVertex2f(4,1);

glVertex2f(4,0);

glVertex2f(-4,0);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-3.9,1);

glVertex2f(-3.9,1.1);

glVertex2f(-0,1.4);

glVertex2f(3.9,1.1);

glVertex2f(3.9,1);

glVertex2f(-0,1.3);

glVertex2f(-3.9,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-5,0);

glVertex2f(-5,-0.1);

glVertex2f(5,-0.1);

glVertex2f(5,0);

glVertex2f(-5,0);

glEnd();

///black border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,0);

glVertex2f(-4,1);

glVertex2f(0,1.3);

glVertex2f(4,1);

glVertex2f(4,0);

glVertex2f(-4,0);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,1);

glVertex2f(-3.9,1.1);

glVertex2f(-0,1.4);

glVertex2f(3.9,1.1);

glVertex2f(3.9,1);

glVertex2f(-0,1.3);

glVertex2f(-3.9,1);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glVertex2f(-5,0);

glVertex2f(-5,-0.1);

glVertex2f(5,-0.1);

glVertex2f(5,0);

glVertex2f(-5,0);

glEnd();

}

///Left Pillar

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4,0);

glVertex2f(-4.5,0);

glVertex2f(-4.5,1);

glVertex2f(-4,1);

glVertex2f(-4,0);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-3.9,1);

glVertex2f(-4.6,1);

glVertex2f(-4.6,1.2);

glVertex2f(-4.5,1.2);

glVertex2f(-4.5,1.1);

glVertex2f(-4,1.1);

glVertex2f(-4,1.2);

glVertex2f(-3.9,1.2);

glVertex2f(-3.9,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4,1.1);

glVertex2f(-4.5,1.1);

glVertex2f(-4.5,1.5);

glVertex2f(-4,1.5);

glVertex2f(-4,1.1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4.6,1.5);

glVertex2f(-4.7,1.6);

glVertex2f(-3.8,1.6);

glVertex2f(-3.9,1.5);

glVertex2f(-4.6,1.5);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4.6,1.6);

glVertex2f(-4.6,1.7);

glVertex2f(-4.5,1.8);

glVertex2f(-4.4,1.9);

glVertex2f(-4.25,2.0);

glVertex2f(-4.1,1.9);

glVertex2f(-4.0,1.8);

glVertex2f(-3.9,1.7);

glVertex2f(-3.9,1.6);

glVertex2f(-4.6,1.6);

glEnd();

///black border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,0);

glVertex2f(-4.5,0);

glVertex2f(-4.5,1);

glVertex2f(-4,1);

glVertex2f(-4,0);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,1);

glVertex2f(-4.6,1);

glVertex2f(-4.6,1.2);

glVertex2f(-4.5,1.2);

glVertex2f(-4.5,1.1);

glVertex2f(-4,1.1);

glVertex2f(-4,1.2);

glVertex2f(-3.9,1.2);

glVertex2f(-3.9,1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,1.1);

glVertex2f(-4.5,1.1);

glVertex2f(-4.5,1.5);

glVertex2f(-4,1.5);

glVertex2f(-4,1.1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,1.5);

glVertex2f(-4.7,1.6);

glVertex2f(-3.8,1.6);

glVertex2f(-3.9,1.5);

glVertex2f(-4.6,1.5);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,1.6);

glVertex2f(-4.6,1.7);

glVertex2f(-4.5,1.8);

glVertex2f(-4.4,1.9);

glVertex2f(-4.25,2.0);

glVertex2f(-4.1,1.9);

glVertex2f(-4.0,1.8);

glVertex2f(-3.9,1.7);

glVertex2f(-3.9,1.6);

glVertex2f(-4.6,1.6);

glEnd();

}

/// Right Pillar

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4,0);

glVertex2f(4.5,0);

glVertex2f(4.5,1);

glVertex2f(4,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(3.9,1);

glVertex2f(4.6,1);

glVertex2f(4.6,1.2);

glVertex2f(4.5,1.2);

glVertex2f(4.5,1.1);

glVertex2f(4,1.1);

glVertex2f(4,1.2);

glVertex2f(3.9,1.2);

glVertex2f(3.9,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4,1.1);

glVertex2f(4.5,1.1);

glVertex2f(4.5,1.5);

glVertex2f(4,1.5);

glVertex2f(4,1.1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4.6,1.5);

glVertex2f(4.7,1.6);

glVertex2f(3.8,1.6);

glVertex2f(3.9,1.5);

glVertex2f(4.6,1.5);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4.6,1.6);

glVertex2f(4.6,1.7);

glVertex2f(4.5,1.8);

glVertex2f(4.4,1.9);

glVertex2f(4.25,2.0);

glVertex2f(4.1,1.9);

glVertex2f(4.0,1.8);

glVertex2f(3.9,1.7);

glVertex2f(3.9,1.6);

glVertex2f(4.6,1.6);

glEnd();

///black border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4,0);

glVertex2f(4.5,0);

glVertex2f(4.5,1);

glVertex2f(4,1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glVertex2f(3.9,1);

glVertex2f(4.6,1);

glVertex2f(4.6,1.2);

glVertex2f(4.5,1.2);

glVertex2f(4.5,1.1);

glVertex2f(4,1.1);

glVertex2f(4,1.2);

glVertex2f(3.9,1.2);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4,1.1);

glVertex2f(4.5,1.1);

glVertex2f(4.5,1.5);

glVertex2f(4,1.5);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4.6,1.5);

glVertex2f(4.7,1.6);

glVertex2f(3.8,1.6);

glVertex2f(3.9,1.5);

glVertex2f(4.6,1.5);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4.6,1.6);

glVertex2f(4.6,1.7);

glVertex2f(4.5,1.8);

glVertex2f(4.4,1.9);

glVertex2f(4.25,2.0);

glVertex2f(4.1,1.9);

glVertex2f(4.0,1.8);

glVertex2f(3.9,1.7);

glVertex2f(3.9,1.6);

glVertex2f(4.6,1.6);

glEnd();

}

///Left window

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(-4.2,1.2);

glVertex2f(-4.3,1.2);

glVertex2f(-4.3,1.4);

glVertex2f(-4.2,1.4);

glVertex2f(-4.2,1.2);

glEnd();

///Right window

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(4.2,1.2);

glVertex2f(4.3,1.2);

glVertex2f(4.3,1.4);

glVertex2f(4.2,1.4);

glVertex2f(4.2,1.2);

glEnd();

///Door -5

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(-3.8,0);

glVertex2f(-3.8,0.8);

glVertex2f(-3.4,0.8);

glVertex2f(-3.4,0);

glVertex2f(-3.8,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-3.8,0.8);

glVertex2f(-3.8,0.5);

glVertex2f(-3.6,0.7);

glVertex2f(-3.4,0.5);

glVertex2f(-3.4,0.8);

glVertex2f(-3.8,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.8,0);

glVertex2f(-3.8,0.8);

glVertex2f(-3.4,0.8);

glVertex2f(-3.4,0);

glVertex2f(-3.8,0);

glEnd();

}

///Door +5

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(3.8,0);

glVertex2f(3.8,0.8);

glVertex2f(3.4,0.8);

glVertex2f(3.4,0);

glVertex2f(3.8,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(3.8,0.8);

glVertex2f(3.8,0.5);

glVertex2f(3.6,0.7);

glVertex2f(3.4,0.5);

glVertex2f(3.4,0.8);

glVertex2f(3.8,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.8,0);

glVertex2f(3.8,0.8);

glVertex2f(3.4,0.8);

glVertex2f(3.4,0);

glVertex2f(3.8,0);

glEnd();

}

///Door -4

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(-3.1,0);

glVertex2f(-3.1,0.8);

glVertex2f(-2.7,0.8);

glVertex2f(-2.7,0);

glVertex2f(-3.1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-3.1,0.8);

glVertex2f(-3.1,0.5);

glVertex2f(-2.9,0.7);

glVertex2f(-2.7,0.5);

glVertex2f(-2.7,0.8);

glVertex2f(-3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.1,0);

glVertex2f(-3.1,0.8);

glVertex2f(-2.7,0.8);

glVertex2f(-2.7,0);

glVertex2f(-3.1,0);

glEnd();

}

///Door +4

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(3.1,0);

glVertex2f(3.1,0.8);

glVertex2f(2.7,0.8);

glVertex2f(2.7,0);

glVertex2f(3.1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(3.1,0.8);

glVertex2f(3.1,0.5);

glVertex2f(2.9,0.7);

glVertex2f(2.7,0.5);

glVertex2f(2.7,0.8);

glVertex2f(3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.1,0);

glVertex2f(3.1,0.8);

glVertex2f(2.7,0.8);

glVertex2f(2.7,0);

glVertex2f(3.1,0);

glEnd();

}

///Door -3

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(-2.4,0);

glVertex2f(-2.4,0.8);

glVertex2f(-2.0,0.8);

glVertex2f(-2.0,0);

glVertex2f(-2.4,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-2.4,0.8);

glVertex2f(-2.4,0.5);

glVertex2f(-2.2,0.7);

glVertex2f(-2.0,0.5);

glVertex2f(-2.0,0.8);

glVertex2f(-3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-2.4,0);

glVertex2f(-2.4,0.8);

glVertex2f(-2.0,0.8);

glVertex2f(-2.0,0);

glVertex2f(-2.4,0);

glEnd();

}

///Door +3

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(2.4,0);

glVertex2f(2.4,0.8);

glVertex2f(2.0,0.8);

glVertex2f(2.0,0);

glVertex2f(2.4,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(2.4,0.8);

glVertex2f(2.4,0.5);

glVertex2f(2.2,0.7);

glVertex2f(2.0,0.5);

glVertex2f(2.0,0.8);

glVertex2f(3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(2.4,0);

glVertex2f(2.4,0.8);

glVertex2f(2.0,0.8);

glVertex2f(2.0,0);

glVertex2f(2.4,0);

glEnd();

}

///Door -2

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(-1.7,0);

glVertex2f(-1.7,0.8);

glVertex2f(-1.3,0.8);

glVertex2f(-1.3,0);

glVertex2f(-1.7,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-1.7,0.8);

glVertex2f(-1.7,0.5);

glVertex2f(-1.5,0.7);

glVertex2f(-1.3,0.5);

glVertex2f(-1.3,0.8);

glVertex2f(-1.7,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1.7,0);

glVertex2f(-1.7,0.8);

glVertex2f(-1.3,0.8);

glVertex2f(-1.3,0);

glVertex2f(-1.7,0);

glEnd();

}

///Door +2

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(1.7,0);

glVertex2f(1.7,0.8);

glVertex2f(1.3,0.8);

glVertex2f(1.3,0);

glVertex2f(1.7,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(1.7,0.8);

glVertex2f(1.7,0.5);

glVertex2f(1.5,0.7);

glVertex2f(1.3,0.5);

glVertex2f(1.3,0.8);

glVertex2f(1.7,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.7,0);

glVertex2f(1.7,0.8);

glVertex2f(1.3,0.8);

glVertex2f(1.3,0);

glVertex2f(1.7,0);

glEnd();

}

///Door -1

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(-1,0);

glVertex2f(-1,0.8);

glVertex2f(-0.6,0.8);

glVertex2f(-0.6,0);

glVertex2f(-1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-1.0,0.8);

glVertex2f(-1.0,0.5);

glVertex2f(-0.8,0.7);

glVertex2f(-0.6,0.5);

glVertex2f(-0.6,0.8);

glVertex2f(-1.0,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1,0);

glVertex2f(-1,0.8);

glVertex2f(-0.6,0.8);

glVertex2f(-0.6,0);

glVertex2f(-1,0);

glEnd();

}

///Door +1

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(1,0);

glVertex2f(1,0.8);

glVertex2f(0.6,0.8);

glVertex2f(0.6,0);

glVertex2f(1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(1.0,0.8);

glVertex2f(1.0,0.5);

glVertex2f(0.8,0.7);

glVertex2f(0.6,0.5);

glVertex2f(0.6,0.8);

glVertex2f(1.0,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1,0);

glVertex2f(1,0.8);

glVertex2f(0.6,0.8);

glVertex2f(0.6,0);

glVertex2f(1,0);

glEnd();

}

///Door 0

glColor3ub(255,255,51);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,0);

glVertex2f(-0.3,1.1);

glVertex2f(0.3,1.1);

glVertex2f(0.3,0);

glVertex2f(-0.3,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,1.1);

glVertex2f(-0.3,0.7);

glVertex2f(0,1);

glVertex2f(0.3,0.7);

glVertex2f(0.3,1.1);

glVertex2f(-0.3,1.1);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-0.3,0);

glVertex2f(-0.3,1.1);

glVertex2f(0.3,1.1);

glVertex2f(0.3,0);

glVertex2f(-0.3,0);

glEnd();

}

///Road

glColor3ub(96,96,96);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,-0.1);

glVertex2f(-1,-4);

glVertex2f(1,-4);

glVertex2f(0.3,-0.1);

glVertex2f(-0.3,-0.1);

glEnd();

glColor3ub(96,96,96);

glBegin(GL\_POLYGON);

glVertex2f(0.3,-0.5);

glVertex2f(0.4,-1.5);

glVertex2f(5,-1.5);

glVertex2f(5,-0.5);

glVertex2f(0.3,-0.5);

glEnd();

///Road Lines

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-0.3);

glVertex2f(0,-0.6);

glEnd();

}

glLineWidth(5.2);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-0.9);

glVertex2f(0,-1.2);

glEnd();

}

glLineWidth(5.4);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-1.5);

glVertex2f(0,-1.8);

glEnd();

}

glLineWidth(5.6);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-2.1);

glVertex2f(0,-2.4);

glEnd();

}

glLineWidth(5.8);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-2.7);

glVertex2f(0,-3.0);

glEnd();

}

glLineWidth(6.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-3.3);

glVertex2f(0,-3.6);

glEnd();

}

glLineWidth(6.2);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-3.9);

glVertex2f(0,-4.2);

glEnd();

}

glLineWidth(6.4);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-4.5);

glVertex2f(0,-5.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.475,-1.0);

glVertex2f(0.775,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(1.1,-1.0);

glVertex2f(1.4,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(1.7,-1.0);

glVertex2f(2.0,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(2.3,-1.0);

glVertex2f(2.6,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(2.9,-1.0);

glVertex2f(3.2,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(3.5,-1.0);

glVertex2f(3.8,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(4.1,-1.0);

glVertex2f(4.4,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(4.7,-1.0);

glVertex2f(5.0,-1.0);

glEnd();

}

///Zebracrossing

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.45,-0.9);

glVertex2f(0.75,-0.9);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.425,-0.8);

glVertex2f(0.725,-0.8);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.4,-0.7);

glVertex2f(0.7,-0.7);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.375,-0.6);

glVertex2f(0.675,-0.6);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.5,-1.1);

glVertex2f(0.8,-1.1);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.525,-1.2);

glVertex2f(0.825,-1.2);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.55,-1.3);

glVertex2f(0.85,-1.3);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.575,-1.4);

glVertex2f(0.875,-1.4);

glEnd();

}

/\*

///Car

glPushMatrix();

glTranslatef(positionCar1,0.0f, 0.0f);

glBegin(GL\_QUADS);

{

glColor3f(1.0f,0.0f,0.0f);

glVertex2f(1.3f,-0.5f);

glVertex2f(1.3f,-0.7f);

glVertex2f(0.6f,-0.7f);

glVertex2f(0.6f,-0.5f);

glEnd();

}

glBegin(GL\_QUADS);

{

glColor3f(0.0f, 0.0f, 1.0f);

glVertex2f(1.3f,-0.5);

glVertex2f(1.2f,-0.28f);

glVertex2f(0.7f,-0.28f);

glVertex2f(0.6f,-0.5f);

glEnd();

}

glLineWidth(1.2);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.3f,-0.5);

glVertex2f(1.2f,-0.28f);

glVertex2f(0.7f,-0.28f);

glVertex2f(0.6f,-0.5f);

glEnd();

}

glBegin(GL\_LINE\_LOOP);

{

glVertex2f(1.2f,-0.5);

glVertex2f(1.2f,-0.28f);

glVertex2f(0.7f,-0.28f);

glVertex2f(0.7f,-0.5f);

glEnd();

}

glColor3f(0.0f,0.0f,0.0f);

int ib;

GLfloat xb=1.15f; GLfloat yb=-.7f; GLfloat radiusb =.12f;

int triangleAmountb = 20;

GLfloat twicePib = 2.0f \* PI;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xb, yb);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xb + (radiusb \* cos(ib \* twicePib / triangleAmountb)),

yb + (radiusb \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glColor3f(0.0f,0.0f,0.0f);

int jb;

GLfloat pb=0.75f; GLfloat qb=-0.7f; GLfloat radb =.12f;

int triangleAmtb = 20;

GLfloat twicepib = 2.0f \* PI;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pb, qb);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pb + (radb \* cos(jb \* twicepib / triangleAmtb)),

qb + (radb \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

glColor3f(1.0f,1.0f,1.0f);

GLfloat radi =.09f;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xb, yb);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xb + (radi \* cos(ib \* twicePib / triangleAmountb)),

yb + (radi \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pb, qb);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pb + (radi \* cos(jb \* twicepib / triangleAmtb)),

qb + (radi \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

///Bus

glBegin(GL\_QUADS);

glColor3ub(179, 255, 102);

glVertex2f(2.7f,-0.7f);

glVertex2f(4.1f,-0.7f);

glVertex2f(4.1f,-0.5f);

glVertex2f(2.7f,-0.5f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(2.7f,-0.5f);

glVertex2f(4.1f,-0.5f);

glVertex2f(4.0f,0.0f);

glVertex2f(2.7f,0.0f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(0,0,128);

glVertex2f(3.8f,-0.5f);

glVertex2f(3.95f,-0.5f);

glVertex2f(3.95f,-0.2f);

glVertex2f(3.8f,-0.2f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(2.9f,-0.5f);

glVertex2f(3.1f,-0.5f);

glVertex2f(3.1f,-0.3f);

glVertex2f(2.9f,-0.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.2f,-0.5f);

glVertex2f(3.4f,-0.5f);

glVertex2f(3.4f,-0.3f);

glVertex2f(3.2f,-0.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.5f,-0.5f);

glVertex2f(3.7f,-0.5f);

glVertex2f(3.7f,-0.3f);

glVertex2f(3.5f,-0.3f);

glEnd();

////

glBegin(GL\_QUADS);

glVertex2f(2.6f,-0.2f);

glVertex2f(2.6f,-0.2f);

glVertex2f(2.8f,-0.1f);

glVertex2f(2.8f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(0,0,128);

glVertex2f(2.9f,-0.2f);

glVertex2f(3.1f,-0.2f);

glVertex2f(3.1f,-0.1f);

glVertex2f(2.9f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.2f,-0.2f);

glVertex2f(3.4f,-0.2f);

glVertex2f(3.4f,-0.1f);

glVertex2f(3.2f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.5f,-0.2f);

glVertex2f(3.7f,-0.2f);

glVertex2f(3.7f,-0.1f);

glVertex2f(3.5f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(0,139,139);

glVertex2f(4.0f,-0.3f);

glVertex2f(4.2f,-0.3f);

glVertex2f(4.2f,-0.5f);

glVertex2f(4.0f,-0.5f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(179, 255, 102);

glVertex2f(4.0f,-0.5f);

glVertex2f(4.2f,-0.5f);

glVertex2f(4.2f,-0.7f);

glVertex2f(4.0f,-0.7f);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3ub(65,105,225);

glVertex2f(4.0f,0.0f);

glVertex2f(4.0f,-0.3f);

glVertex2f(4.2f,-0.3f);

glEnd();

///wheel

glColor3f(0,0,0);

GLfloat xbpr=3.0f; GLfloat ybpr=-0.7f,radbw=.13,radiw=.09;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xbpr, ybpr);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xbpr + (radbw \* cos(ib \* twicePib / triangleAmountb)),

ybpr + (radbw \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glColor3f(0,0,0);

GLfloat pbpt=3.8f; GLfloat qbpt=-0.7f;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pbpt, qbpt);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pbpt + (radbw \* cos(jb \* twicepib / triangleAmtb)),

qbpt + (radbw \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

glColor3f(1,1,1);

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xbpr, ybpr);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xbpr + (radiw \* cos(ib \* twicePib / triangleAmountb)),

ybpr + (radiw \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pbpt, qbpt);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pbpt + (radiw \* cos(jb \* twicepib / triangleAmtb)),

qbpt + (radiw \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

glPopMatrix();

\*/

///Dome 0

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,1.4);

glVertex2f(-0.3,1.4);

glVertex2f(-0.2,1.625);

glVertex2f(-0.1,1.725);

glVertex2f(0.0,1.8);

glVertex2f(0.1,1.725);

glVertex2f(0.2,1.625);

glVertex2f(0.3,1.4);

glVertex2f(0.0,1.4);

glVertex2f(-0.3,1.4);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-0.3,1.4);

glVertex2f(-0.3,1.4);

glVertex2f(-0.2,1.625);

glVertex2f(-0.1,1.725);

glVertex2f(0.0,1.8);

glVertex2f(0.1,1.725);

glVertex2f(0.2,1.625);

glVertex2f(0.3,1.4);

glVertex2f(0.0,1.4);

glVertex2f(-0.3,1.4);

glEnd();

}

///Dome +1

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(0.350,1.375);

glVertex2f(0.4,1.5);

glVertex2f(0.5,1.6);

glVertex2f(0.6,1.65);

glVertex2f(0.7,1.7);

glVertex2f(0.8,1.65);

glVertex2f(0.9,1.6);

glVertex2f(1.0,1.465);

glVertex2f(1.050,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(0.350,1.375);

glVertex2f(0.4,1.5);

glVertex2f(0.5,1.6);

glVertex2f(0.6,1.65);

glVertex2f(0.7,1.7);

glVertex2f(0.8,1.65);

glVertex2f(0.9,1.6);

glVertex2f(1.0,1.465);

glVertex2f(1.050,1.325);

glEnd();

}

///Dome +2

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(1.1,1.325);

glVertex2f(1.125,1.4);

glVertex2f(1.2,1.5);

glVertex2f(1.4,1.6);

glVertex2f(1.55,1.5);

glVertex2f(1.65,1.4);

glVertex2f(1.7,1.285);

glVertex2f(1.1,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.1,1.325);

glVertex2f(1.125,1.4);

glVertex2f(1.2,1.5);

glVertex2f(1.4,1.6);

glVertex2f(1.55,1.5);

glVertex2f(1.65,1.4);

glVertex2f(1.7,1.285);

glVertex2f(1.1,1.325);

glEnd();

}

///Dome +3

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(1.775,1.265);

glVertex2f(1.9,1.445);

glVertex2f(2.1,1.55);

glVertex2f(2.2,1.475);

glVertex2f(2.285,1.4);

glVertex2f(2.3,1.4);

glVertex2f(2.4,1.225);

glVertex2f(1.775,1.265);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.775,1.265);

glVertex2f(1.9,1.445);

glVertex2f(2.1,1.55);

glVertex2f(2.2,1.475);

glVertex2f(2.285,1.4);

glVertex2f(2.3,1.4);

glVertex2f(2.4,1.225);

glVertex2f(1.775,1.265);

glEnd();

}

///Dome +4

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(2.5,1.215);

glVertex2f(2.605,1.335);

glVertex2f(2.8,1.45);

glVertex2f(2.975,1.335);

glVertex2f(3.1,1.165);

glVertex2f(2.5,1.215);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(2.5,1.215);

glVertex2f(2.605,1.335);

glVertex2f(2.8,1.45);

glVertex2f(2.975,1.335);

glVertex2f(3.1,1.165);

glVertex2f(2.5,1.215);

glEnd();

}

///Dome +5

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(3.21,1.2);

glVertex2f(3.35,1.32);

glVertex2f(3.5,1.4);

glVertex2f(3.65,1.32);

glVertex2f(3.8,1.115);

glVertex2f(3.2,1.175);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.21,1.2);

glVertex2f(3.35,1.32);

glVertex2f(3.5,1.4);

glVertex2f(3.65,1.32);

glVertex2f(3.8,1.115);

glVertex2f(3.2,1.175);

glEnd();

}

///Dome -1

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-0.350,1.375);

glVertex2f(-0.4,1.5);

glVertex2f(-0.5,1.6);

glVertex2f(-0.6,1.65);

glVertex2f(-0.7,1.7);

glVertex2f(-0.8,1.65);

glVertex2f(-0.9,1.6);

glVertex2f(-1.0,1.465);

glVertex2f(-1.050,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-0.350,1.375);

glVertex2f(-0.4,1.5);

glVertex2f(-0.5,1.6);

glVertex2f(-0.6,1.65);

glVertex2f(-0.7,1.7);

glVertex2f(-0.8,1.65);

glVertex2f(-0.9,1.6);

glVertex2f(-1.0,1.465);

glVertex2f(-1.050,1.325);

glEnd();

}

///Dome -2

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-1.1,1.325);

glVertex2f(-1.125,1.4);

glVertex2f(-1.2,1.5);

glVertex2f(-1.4,1.6);

glVertex2f(-1.55,1.5);

glVertex2f(-1.65,1.4);

glVertex2f(-1.7,1.285);

glVertex2f(-1.1,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1.1,1.325);

glVertex2f(-1.125,1.4);

glVertex2f(-1.2,1.5);

glVertex2f(-1.4,1.6);

glVertex2f(-1.55,1.5);

glVertex2f(-1.65,1.4);

glVertex2f(-1.7,1.285);

glVertex2f(-1.1,1.325);

glEnd();

}

///Dome -3

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-1.775,1.265);

glVertex2f(-1.9,1.445);

glVertex2f(-2.1,1.55);

glVertex2f(-2.2,1.475);

glVertex2f(-2.285,1.4);

glVertex2f(-2.3,1.4);

glVertex2f(-2.4,1.225);

glVertex2f(-1.775,1.265);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1.775,1.265);

glVertex2f(-1.9,1.445);

glVertex2f(-2.1,1.55);

glVertex2f(-2.2,1.475);

glVertex2f(-2.285,1.4);

glVertex2f(-2.3,1.4);

glVertex2f(-2.4,1.225);

glVertex2f(-1.775,1.265);

glEnd();

}

///Dome -4

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-2.5,1.215);

glVertex2f(-2.605,1.335);

glVertex2f(-2.8,1.45);

glVertex2f(-2.975,1.335);

glVertex2f(-3.1,1.165);

glVertex2f(-2.5,1.215);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-2.5,1.215);

glVertex2f(-2.605,1.335);

glVertex2f(-2.8,1.45);

glVertex2f(-2.975,1.335);

glVertex2f(-3.1,1.165);

glVertex2f(-2.5,1.215);

glEnd();

}

///Dome -5

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-3.21,1.2);

glVertex2f(-3.35,1.32);

glVertex2f(-3.5,1.4);

glVertex2f(-3.65,1.32);

glVertex2f(-3.8,1.115);

glVertex2f(-3.2,1.175);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.21,1.2);

glVertex2f(-3.35,1.32);

glVertex2f(-3.5,1.4);

glVertex2f(-3.65,1.32);

glVertex2f(-3.8,1.115);

glVertex2f(-3.2,1.175);

glEnd();

}

///Fence

glColor3ub(192,192,192);

glBegin(GL\_POLYGON);

glVertex2f(-5,-1);

glVertex2f(-3.5,-1);

glVertex2f(-3.7,-1.2);

glVertex2f(-5,-1.2);

glVertex2f(-5,-1);

glEnd();

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-5,-1);

glVertex2f(-3.5,-1);

glVertex2f(-3.7,-1.2);

glVertex2f(-5,-1.2);

glVertex2f(-5,-1);

glEnd();

}

glColor3ub(192,192,192);

glBegin(GL\_POLYGON);

glVertex2f(-3.5,-1);

glVertex2f(-5,-2.5);

glVertex2f(-5,-2.7);

glVertex2f(-3.5,-1.2);

glVertex2f(-3.5,-1);

glEnd();

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-1);

glVertex2f(-5,-2.5);

glVertex2f(-5,-2.7);

glVertex2f(-3.5,-1.2);

glVertex2f(-3.5,-1);

glEnd();

}

glColor3ub(244,164,96);

glBegin(GL\_POLYGON);

glVertex2f(-5,-1.2);

glVertex2f(-3.7,-1.2);

glVertex2f(-5,-2.5);

glVertex2f(-5,-1.2);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.9,-1);

glVertex2f(-4.9,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.8,-1);

glVertex2f(-4.8,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.7,-1);

glVertex2f(-4.7,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,-1);

glVertex2f(-4.6,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.5,-1);

glVertex2f(-4.5,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.4,-1);

glVertex2f(-4.4,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.3,-1);

glVertex2f(-4.3,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.2,-1);

glVertex2f(-4.2,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.1,-1);

glVertex2f(-4.1,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,-1);

glVertex2f(-4,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,-1);

glVertex2f(-3.9,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.8,-1);

glVertex2f(-3.8,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.7,-1);

glVertex2f(-3.7,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.6,-1);

glVertex2f(-3.6,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-1);

glVertex2f(-3.5,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.9,-2.4);

glVertex2f(-4.9,-2.1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.8,-2.3);

glVertex2f(-4.8,-2.0);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.7,-2.2);

glVertex2f(-4.7,-1.9);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,-2.1);

glVertex2f(-4.6,-1.8);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.5,-2);

glVertex2f(-4.5,-1.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.4,-1.9);

glVertex2f(-4.4,-1.6);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.3,-1.8);

glVertex2f(-4.3,-1.5);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.2,-1.7);

glVertex2f(-4.2,-1.4);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.1,-1.6);

glVertex2f(-4.1,-1.3);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,-1.5);

glVertex2f(-4,-1.2);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,-1.4);

glVertex2f(-3.9,-1.1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.8,-1.3);

glVertex2f(-3.8,-1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.7,-1.2);

glVertex2f(-3.7,-0.9);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.6,-1.1);

glVertex2f(-3.6,-0.8);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-5,-0.9);

glVertex2f(-3.5,-0.9);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-5,-0.8);

glVertex2f(-3.5,-0.8);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-0.8);

glVertex2f(-5,-2.3);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-0.9);

glVertex2f(-5,-2.4);

glEnd();

}

///Light 1

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(-0.5f,-0.9f);

glVertex2f(-0.6f,-0.9f);

glVertex2f(-0.6f,-0.3f);

glVertex2f(-0.5f,-0.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(-0.5f,-0.4f);

glVertex2f(-0.3f,-0.4f);

glVertex2f(-0.3f,-0.3f);

glVertex2f(-0.5f,-0.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(-0.4f,-0.5f);

glVertex2f(-0.2f,-0.5f);

glVertex2f(-0.3f,-0.4f);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(-0.4f,-0.9f);

glVertex2f(-0.2f,-0.9f);

glVertex2f(-0.3f,-0.5f);

glEnd();

///Light 2

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(-0.7f,-1.9f);

glVertex2f(-0.8f,-1.9f);

glVertex2f(-0.8f,-1.3f);

glVertex2f(-0.7f,-1.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(-0.7f,-1.4f);

glVertex2f(-0.5f,-1.4f);

glVertex2f(-0.5f,-1.3f);

glVertex2f(-0.7f,-1.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(-0.6f,-1.5f);

glVertex2f(-0.4f,-1.5f);

glVertex2f(-0.5f,-1.4f);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(-0.6f,-1.9f);

glVertex2f(-0.4f,-1.9f);

glVertex2f(-0.5f,-1.5f);

glEnd();

///Light 3

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(-0.85f,-2.9f);

glVertex2f(-0.95f,-2.9f);

glVertex2f(-0.95f,-2.3f);

glVertex2f(-0.85f,-2.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(-0.85f,-2.4f);

glVertex2f(-0.65f,-2.4f);

glVertex2f(-0.65f,-2.3f);

glVertex2f(-0.85f,-2.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(-0.75f,-2.5f);

glVertex2f(-0.55f,-2.5f);

glVertex2f(-0.65f,-2.4f);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(-0.75f,-2.9f);

glVertex2f(-0.55f,-2.9f);

glVertex2f(-0.65f,-2.5f);

glEnd();

///Light 4

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(0.65f,-1.9f);

glVertex2f(0.75f,-1.9f);

glVertex2f(0.75f,-1.3f);

glVertex2f(0.65f,-1.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(0.65f,-1.4f);

glVertex2f(0.45f,-1.4f);

glVertex2f(0.45f,-1.3f);

glVertex2f(0.65f,-1.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(0.55f,-1.5f);

glVertex2f(0.35f,-1.5f);

glVertex2f(0.45f,-1.4f);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(0.55f,-1.9f);

glVertex2f(0.35f,-1.9f);

glVertex2f(0.45f,-1.5f);

glEnd();

///Light 5

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(0.85f,-2.9f);

glVertex2f(0.95f,-2.9f);

glVertex2f(0.95f,-2.3f);

glVertex2f(0.85f,-2.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(0.85f,-2.4f);

glVertex2f(0.65f,-2.4f);

glVertex2f(0.65f,-2.3f);

glVertex2f(0.85f,-2.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(0.75f,-2.5f);

glVertex2f(0.55f,-2.5f);

glVertex2f(0.65f,-2.4f);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(0.75f,-2.9f);

glVertex2f(0.55f,-2.9f);

glVertex2f(0.65f,-2.5f);

glEnd();

///Light 6

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(1.45f,-1.3f);

glVertex2f(1.75f,-1.3f);

glVertex2f(1.6f,-1.0f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(1.65f,-1.7f);

glVertex2f(1.75f,-1.7f);

glVertex2f(1.75f,-1.1f);

glVertex2f(1.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(1.65f,-1.1f);

glVertex2f(1.75f,-1.1f);

glVertex2f(1.65f,-0.9f);

glVertex2f(1.55f,-0.9f);

glEnd();

///Light 7

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(2.45f,-1.3f);

glVertex2f(2.75f,-1.3f);

glVertex2f(2.6f,-1.0f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(2.65f,-1.7f);

glVertex2f(2.75f,-1.7f);

glVertex2f(2.75f,-1.1f);

glVertex2f(2.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(2.65f,-1.1f);

glVertex2f(2.75f,-1.1f);

glVertex2f(2.65f,-0.9f);

glVertex2f(2.55f,-0.9f);

glEnd();

///Light 8

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(3.45f,-1.3f);

glVertex2f(3.75f,-1.3f);

glVertex2f(3.6f,-1.0f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(3.65f,-1.7f);

glVertex2f(3.75f,-1.7f);

glVertex2f(3.75f,-1.1f);

glVertex2f(3.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(3.65f,-1.1f);

glVertex2f(3.75f,-1.1f);

glVertex2f(3.65f,-0.9f);

glVertex2f(3.55f,-0.9f);

glEnd();

///Light 9

glBegin(GL\_TRIANGLES);

glColor3ub(255, 255, 0);

glVertex2f(4.45f,-1.3f);

glVertex2f(4.75f,-1.3f);

glVertex2f(4.6f,-1.0f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(4.65f,-1.7f);

glVertex2f(4.75f,-1.7f);

glVertex2f(4.75f,-1.1f);

glVertex2f(4.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(4.65f,-1.1f);

glVertex2f(4.75f,-1.1f);

glVertex2f(4.65f,-0.9f);

glVertex2f(4.55f,-0.9f);

glEnd();

glPopMatrix();

glFlush ();

}

void displayDayToNight(int value)

{

glutDisplayFunc(myDisplayNight);

}

///Day

void myDisplayDay(void)

{

glClearColor(1.0f, 1.0f, 1.0f, 0.0f);

glClear(GL\_COLOR\_BUFFER\_BIT);

glLoadIdentity();

gluOrtho2D(-5,5,-4,4);

///sky

glColor3ub(128, 255, 255);

glBegin(GL\_QUADS);

glVertex2f(-5,4);

glVertex2f(-5,0);

glVertex2f(5,0);

glVertex2f(5,4);

glEnd();

int i1;

///Sun

glPushMatrix();

glTranslatef(0.0f,positionSun, 0.0f);

GLfloat x1=2.5; GLfloat y1=3.5; GLfloat radius1 =.4f;

int triangleAmount = 100; //# of triangles used to draw circle

GLfloat twicePi = 2.0f \* PI;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(235,31,31);

glVertex2f(x1, y1); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x1 + (radius1 \* cos(i1 \* twicePi / triangleAmount)),

y1 + (radius1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

glPopMatrix();

///clouds

glPushMatrix();

glTranslatef(positionCloud,0.0, 0.0f);

GLfloat global\_ambient2[] = {3.5,3.5,3.5, 0.1};//ambient RGBA intensity of light

glLightModelfv(GL\_LIGHT\_MODEL\_AMBIENT, global\_ambient2);

GLfloat x2=-2.5; GLfloat y2=3.5; GLfloat radius2 =.3f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x2, y2); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x2 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y2 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x3=-2.9; GLfloat y3=3.3;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x3, y3); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x3 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y3 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x4=-2.65; GLfloat y4=2.95;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x4, y4); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x4 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y4 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x5=2; GLfloat y5=3.4;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x5, y5); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x5 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y5 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x6=2.26; GLfloat y6=3.04;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x6, y6); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x6 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y6 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x7=1.8; GLfloat y7=3;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x7, y7); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x7 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y7 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x8=-2.2; GLfloat y8=3.2;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x8, y8); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x8 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y8 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat x9=1.6; GLfloat y9=3.4;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(224,255,255);

glVertex2f(x9, y9); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

x9 + (radius2 \* cos(i1 \* twicePi / triangleAmount)),

y9 + (radius2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

glPopMatrix();

///Tree

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-0.15,2.1);

glVertex2f(-0.15,1.5);

glVertex2f(-0.05,1.5);

glVertex2f(-0.05,2.1);

glVertex2f(-0.15,2.1);

glEnd();

GLfloat xt1=-0.3; GLfloat yt1=2.1; GLfloat radiust1 =.2f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt1, yt1); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt1 + (radiust1 \* cos(i1 \* twicePi / triangleAmount)),

yt1 + (radiust1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt2=-0.1; GLfloat yt2=2.3;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt2, yt2); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt2 + (radiust1 \* cos(i1 \* twicePi / triangleAmount)),

yt2 + (radiust1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt3=0.1; GLfloat yt3=2.1;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt3, yt3); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt3 + (radiust1 \* cos(i1 \* twicePi / triangleAmount)),

yt3 + (radiust1 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

///Tree2

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(0.65,2.1);

glVertex2f(0.65,1.5);

glVertex2f(0.55,1.5);

glVertex2f(0.55,2.1);

glVertex2f(0.65,2.1);

glEnd();

GLfloat xt4=0.4; GLfloat yt4=2.0; GLfloat radiust2 =.2f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt4, yt4); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt4 + (radiust2 \* cos(i1 \* twicePi / triangleAmount)),

yt4 + (radiust2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt5=0.6; GLfloat yt5=2.2;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt5, yt5); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt5 + (radiust2 \* cos(i1 \* twicePi / triangleAmount)),

yt5 + (radiust2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt6=0.8; GLfloat yt6=2.0;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt6, yt6); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt6 + (radiust2 \* cos(i1 \* twicePi / triangleAmount)),

yt6 + (radiust2 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

///Tree3

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-0.75,2.1);

glVertex2f(-0.75,1.5);

glVertex2f(-0.65,1.5);

glVertex2f(-0.65,2.1);

glVertex2f(-0.75,2.1);

glEnd();

GLfloat xt7=-0.5; GLfloat yt7=2.0; GLfloat radiust3 =.2f;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt7, yt7); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt7 + (radiust3 \* cos(i1 \* twicePi / triangleAmount)),

yt7 + (radiust3 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt8=-0.7; GLfloat yt8=2.2;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt8, yt8); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt8 + (radiust3 \* cos(i1 \* twicePi / triangleAmount)),

yt8 + (radiust3 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

GLfloat xt9=-0.9; GLfloat yt9=2.0;

glBegin(GL\_TRIANGLE\_FAN);

glColor3ub(0,128,0);

glVertex2f(xt9, yt9); // center of circle

for(i1 = 0; i1 <= triangleAmount;i1++) {

glVertex2f(

xt9 + (radiust3 \* cos(i1 \* twicePi / triangleAmount)),

yt9 + (radiust3 \* sin(i1 \* twicePi / triangleAmount))

);

}

glEnd();

///Tree 4

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(2.85,1.8);

glVertex2f(2.85,1.2);

glVertex2f(2.95,1.2);

glVertex2f(2.95,1.8);

glVertex2f(2.85,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(2.55,1.7);

glVertex2f(2.90,1.9);

glVertex2f(3.25,1.7);

glVertex2f(2.65,1.7);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(2.6,1.8);

glVertex2f(2.90,2.0);

glVertex2f(3.2,1.8);

glVertex2f(2.6,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(2.65,1.9);

glVertex2f(2.90,2.1);

glVertex2f(3.15,1.9);

glVertex2f(2.65,1.9);

glEnd();

///Tree5

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-2.85,1.8);

glVertex2f(-2.85,1.2);

glVertex2f(-2.95,1.2);

glVertex2f(-2.95,1.8);

glVertex2f(-2.85,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-2.55,1.7);

glVertex2f(-2.90,1.9);

glVertex2f(-3.25,1.7);

glVertex2f(-2.55,1.7);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-2.6,1.8);

glVertex2f(-2.90,2.0);

glVertex2f(-3.2,1.8);

glVertex2f(-2.6,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-2.65,1.9);

glVertex2f(-2.90,2.1);

glVertex2f(-3.15,1.9);

glVertex2f(-2.65,1.9);

glEnd();

///Tree 6

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(3.55,1.8);

glVertex2f(3.55,1.2);

glVertex2f(3.65,1.2);

glVertex2f(3.65,1.8);

glVertex2f(3.55,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(3.25,1.65);

glVertex2f(3.60,1.85);

glVertex2f(3.95,1.65);

glVertex2f(3.25,1.65);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(3.3,1.75);

glVertex2f(3.60,1.95);

glVertex2f(3.9,1.75);

glVertex2f(3.3,1.75);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(3.35,1.85);

glVertex2f(3.60,2.05);

glVertex2f(3.85,1.85);

glVertex2f(3.35,1.85);

glEnd();

///Tree 7

glColor3ub(90,22,22);

glBegin(GL\_POLYGON);

glVertex2f(-3.55,1.8);

glVertex2f(-3.55,1.2);

glVertex2f(-3.65,1.2);

glVertex2f(-3.65,1.8);

glVertex2f(-3.55,1.8);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.25,1.65);

glVertex2f(-3.60,1.85);

glVertex2f(-3.95,1.65);

glVertex2f(-3.25,1.65);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.3,1.75);

glVertex2f(-3.60,1.95);

glVertex2f(-3.9,1.75);

glVertex2f(-3.3,1.75);

glEnd();

glColor3ub(0,153,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.35,1.85);

glVertex2f(-3.60,2.05);

glVertex2f(-3.85,1.85);

glVertex2f(-3.35,1.85);

glEnd();

///Field

glColor3ub(50,205,50);

glBegin(GL\_POLYGON);

glVertex2f(-5,0);

glVertex2f(5,0);

glVertex2f(5,-4);

glVertex2f(-5,-4);

glVertex2f(-5,0);

glEnd();

///Mosque

///center Structure

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4,0);

glVertex2f(-4,1);

glVertex2f(0,1.3);

glVertex2f(4,1);

glVertex2f(4,0);

glVertex2f(-4,0);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-3.9,1);

glVertex2f(-3.9,1.1);

glVertex2f(-0,1.4);

glVertex2f(3.9,1.1);

glVertex2f(3.9,1);

glVertex2f(-0,1.3);

glVertex2f(-3.9,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-5,0);

glVertex2f(-5,-0.1);

glVertex2f(5,-0.1);

glVertex2f(5,0);

glVertex2f(-5,0);

glEnd();

///black border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,0);

glVertex2f(-4,1);

glVertex2f(0,1.3);

glVertex2f(4,1);

glVertex2f(4,0);

glVertex2f(-4,0);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,1);

glVertex2f(-3.9,1.1);

glVertex2f(-0,1.4);

glVertex2f(3.9,1.1);

glVertex2f(3.9,1);

glVertex2f(-0,1.3);

glVertex2f(-3.9,1);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glVertex2f(-5,0);

glVertex2f(-5,-0.1);

glVertex2f(5,-0.1);

glVertex2f(5,0);

glVertex2f(-5,0);

glEnd();

}

///Left Pillar

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4,0);

glVertex2f(-4.5,0);

glVertex2f(-4.5,1);

glVertex2f(-4,1);

glVertex2f(-4,0);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-3.9,1);

glVertex2f(-4.6,1);

glVertex2f(-4.6,1.2);

glVertex2f(-4.5,1.2);

glVertex2f(-4.5,1.1);

glVertex2f(-4,1.1);

glVertex2f(-4,1.2);

glVertex2f(-3.9,1.2);

glVertex2f(-3.9,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4,1.1);

glVertex2f(-4.5,1.1);

glVertex2f(-4.5,1.5);

glVertex2f(-4,1.5);

glVertex2f(-4,1.1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4.6,1.5);

glVertex2f(-4.7,1.6);

glVertex2f(-3.8,1.6);

glVertex2f(-3.9,1.5);

glVertex2f(-4.6,1.5);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-4.6,1.6);

glVertex2f(-4.6,1.7);

glVertex2f(-4.5,1.8);

glVertex2f(-4.4,1.9);

glVertex2f(-4.25,2.0);

glVertex2f(-4.1,1.9);

glVertex2f(-4.0,1.8);

glVertex2f(-3.9,1.7);

glVertex2f(-3.9,1.6);

glVertex2f(-4.6,1.6);

glEnd();

///black border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,0);

glVertex2f(-4.5,0);

glVertex2f(-4.5,1);

glVertex2f(-4,1);

glVertex2f(-4,0);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,1);

glVertex2f(-4.6,1);

glVertex2f(-4.6,1.2);

glVertex2f(-4.5,1.2);

glVertex2f(-4.5,1.1);

glVertex2f(-4,1.1);

glVertex2f(-4,1.2);

glVertex2f(-3.9,1.2);

glVertex2f(-3.9,1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,1.1);

glVertex2f(-4.5,1.1);

glVertex2f(-4.5,1.5);

glVertex2f(-4,1.5);

glVertex2f(-4,1.1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,1.5);

glVertex2f(-4.7,1.6);

glVertex2f(-3.8,1.6);

glVertex2f(-3.9,1.5);

glVertex2f(-4.6,1.5);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,1.6);

glVertex2f(-4.6,1.7);

glVertex2f(-4.5,1.8);

glVertex2f(-4.4,1.9);

glVertex2f(-4.25,2.0);

glVertex2f(-4.1,1.9);

glVertex2f(-4.0,1.8);

glVertex2f(-3.9,1.7);

glVertex2f(-3.9,1.6);

glVertex2f(-4.6,1.6);

glEnd();

}

/// Right Pillar

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4,0);

glVertex2f(4.5,0);

glVertex2f(4.5,1);

glVertex2f(4,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(3.9,1);

glVertex2f(4.6,1);

glVertex2f(4.6,1.2);

glVertex2f(4.5,1.2);

glVertex2f(4.5,1.1);

glVertex2f(4,1.1);

glVertex2f(4,1.2);

glVertex2f(3.9,1.2);

glVertex2f(3.9,1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4,1.1);

glVertex2f(4.5,1.1);

glVertex2f(4.5,1.5);

glVertex2f(4,1.5);

glVertex2f(4,1.1);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4.6,1.5);

glVertex2f(4.7,1.6);

glVertex2f(3.8,1.6);

glVertex2f(3.9,1.5);

glVertex2f(4.6,1.5);

glEnd();

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(4.6,1.6);

glVertex2f(4.6,1.7);

glVertex2f(4.5,1.8);

glVertex2f(4.4,1.9);

glVertex2f(4.25,2.0);

glVertex2f(4.1,1.9);

glVertex2f(4.0,1.8);

glVertex2f(3.9,1.7);

glVertex2f(3.9,1.6);

glVertex2f(4.6,1.6);

glEnd();

///black border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4,0);

glVertex2f(4.5,0);

glVertex2f(4.5,1);

glVertex2f(4,1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glVertex2f(3.9,1);

glVertex2f(4.6,1);

glVertex2f(4.6,1.2);

glVertex2f(4.5,1.2);

glVertex2f(4.5,1.1);

glVertex2f(4,1.1);

glVertex2f(4,1.2);

glVertex2f(3.9,1.2);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4,1.1);

glVertex2f(4.5,1.1);

glVertex2f(4.5,1.5);

glVertex2f(4,1.5);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4.6,1.5);

glVertex2f(4.7,1.6);

glVertex2f(3.8,1.6);

glVertex2f(3.9,1.5);

glVertex2f(4.6,1.5);

glEnd();

}

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(4.6,1.6);

glVertex2f(4.6,1.7);

glVertex2f(4.5,1.8);

glVertex2f(4.4,1.9);

glVertex2f(4.25,2.0);

glVertex2f(4.1,1.9);

glVertex2f(4.0,1.8);

glVertex2f(3.9,1.7);

glVertex2f(3.9,1.6);

glVertex2f(4.6,1.6);

glEnd();

}

///Left window

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(-4.2,1.2);

glVertex2f(-4.3,1.2);

glVertex2f(-4.3,1.4);

glVertex2f(-4.2,1.4);

glVertex2f(-4.2,1.2);

glEnd();

///Right window

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(4.2,1.2);

glVertex2f(4.3,1.2);

glVertex2f(4.3,1.4);

glVertex2f(4.2,1.4);

glVertex2f(4.2,1.2);

glEnd();

///Door -5

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.8,0);

glVertex2f(-3.8,0.8);

glVertex2f(-3.4,0.8);

glVertex2f(-3.4,0);

glVertex2f(-3.8,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-3.8,0.8);

glVertex2f(-3.8,0.5);

glVertex2f(-3.6,0.7);

glVertex2f(-3.4,0.5);

glVertex2f(-3.4,0.8);

glVertex2f(-3.8,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.8,0);

glVertex2f(-3.8,0.8);

glVertex2f(-3.4,0.8);

glVertex2f(-3.4,0);

glVertex2f(-3.8,0);

glEnd();

}

///Door +5

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(3.8,0);

glVertex2f(3.8,0.8);

glVertex2f(3.4,0.8);

glVertex2f(3.4,0);

glVertex2f(3.8,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(3.8,0.8);

glVertex2f(3.8,0.5);

glVertex2f(3.6,0.7);

glVertex2f(3.4,0.5);

glVertex2f(3.4,0.8);

glVertex2f(3.8,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.8,0);

glVertex2f(3.8,0.8);

glVertex2f(3.4,0.8);

glVertex2f(3.4,0);

glVertex2f(3.8,0);

glEnd();

}

///Door -4

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(-3.1,0);

glVertex2f(-3.1,0.8);

glVertex2f(-2.7,0.8);

glVertex2f(-2.7,0);

glVertex2f(-3.1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-3.1,0.8);

glVertex2f(-3.1,0.5);

glVertex2f(-2.9,0.7);

glVertex2f(-2.7,0.5);

glVertex2f(-2.7,0.8);

glVertex2f(-3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.1,0);

glVertex2f(-3.1,0.8);

glVertex2f(-2.7,0.8);

glVertex2f(-2.7,0);

glVertex2f(-3.1,0);

glEnd();

}

///Door +4

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(3.1,0);

glVertex2f(3.1,0.8);

glVertex2f(2.7,0.8);

glVertex2f(2.7,0);

glVertex2f(3.1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(3.1,0.8);

glVertex2f(3.1,0.5);

glVertex2f(2.9,0.7);

glVertex2f(2.7,0.5);

glVertex2f(2.7,0.8);

glVertex2f(3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.1,0);

glVertex2f(3.1,0.8);

glVertex2f(2.7,0.8);

glVertex2f(2.7,0);

glVertex2f(3.1,0);

glEnd();

}

///Door -3

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(-2.4,0);

glVertex2f(-2.4,0.8);

glVertex2f(-2.0,0.8);

glVertex2f(-2.0,0);

glVertex2f(-2.4,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-2.4,0.8);

glVertex2f(-2.4,0.5);

glVertex2f(-2.2,0.7);

glVertex2f(-2.0,0.5);

glVertex2f(-2.0,0.8);

glVertex2f(-3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-2.4,0);

glVertex2f(-2.4,0.8);

glVertex2f(-2.0,0.8);

glVertex2f(-2.0,0);

glVertex2f(-2.4,0);

glEnd();

}

///Door +3

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(2.4,0);

glVertex2f(2.4,0.8);

glVertex2f(2.0,0.8);

glVertex2f(2.0,0);

glVertex2f(2.4,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(2.4,0.8);

glVertex2f(2.4,0.5);

glVertex2f(2.2,0.7);

glVertex2f(2.0,0.5);

glVertex2f(2.0,0.8);

glVertex2f(3.1,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(2.4,0);

glVertex2f(2.4,0.8);

glVertex2f(2.0,0.8);

glVertex2f(2.0,0);

glVertex2f(2.4,0);

glEnd();

}

///Door -2

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(-1.7,0);

glVertex2f(-1.7,0.8);

glVertex2f(-1.3,0.8);

glVertex2f(-1.3,0);

glVertex2f(-1.7,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-1.7,0.8);

glVertex2f(-1.7,0.5);

glVertex2f(-1.5,0.7);

glVertex2f(-1.3,0.5);

glVertex2f(-1.3,0.8);

glVertex2f(-1.7,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1.7,0);

glVertex2f(-1.7,0.8);

glVertex2f(-1.3,0.8);

glVertex2f(-1.3,0);

glVertex2f(-1.7,0);

glEnd();

}

///Door +2

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(1.7,0);

glVertex2f(1.7,0.8);

glVertex2f(1.3,0.8);

glVertex2f(1.3,0);

glVertex2f(1.7,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(1.7,0.8);

glVertex2f(1.7,0.5);

glVertex2f(1.5,0.7);

glVertex2f(1.3,0.5);

glVertex2f(1.3,0.8);

glVertex2f(1.7,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.7,0);

glVertex2f(1.7,0.8);

glVertex2f(1.3,0.8);

glVertex2f(1.3,0);

glVertex2f(1.7,0);

glEnd();

}

///Door -1

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(-1,0);

glVertex2f(-1,0.8);

glVertex2f(-0.6,0.8);

glVertex2f(-0.6,0);

glVertex2f(-1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-1.0,0.8);

glVertex2f(-1.0,0.5);

glVertex2f(-0.8,0.7);

glVertex2f(-0.6,0.5);

glVertex2f(-0.6,0.8);

glVertex2f(-1.0,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1,0);

glVertex2f(-1,0.8);

glVertex2f(-0.6,0.8);

glVertex2f(-0.6,0);

glVertex2f(-1,0);

glEnd();

}

///Door +1

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(1,0);

glVertex2f(1,0.8);

glVertex2f(0.6,0.8);

glVertex2f(0.6,0);

glVertex2f(1,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(1.0,0.8);

glVertex2f(1.0,0.5);

glVertex2f(0.8,0.7);

glVertex2f(0.6,0.5);

glVertex2f(0.6,0.8);

glVertex2f(1.0,0.8);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1,0);

glVertex2f(1,0.8);

glVertex2f(0.6,0.8);

glVertex2f(0.6,0);

glVertex2f(1,0);

glEnd();

}

///Door 0

glColor3ub(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,0);

glVertex2f(-0.3,1.1);

glVertex2f(0.3,1.1);

glVertex2f(0.3,0);

glVertex2f(-0.3,0);

glEnd();

glColor3ub(205,133,63);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,1.1);

glVertex2f(-0.3,0.7);

glVertex2f(0,1);

glVertex2f(0.3,0.7);

glVertex2f(0.3,1.1);

glVertex2f(-0.3,1.1);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-0.3,0);

glVertex2f(-0.3,1.1);

glVertex2f(0.3,1.1);

glVertex2f(0.3,0);

glVertex2f(-0.3,0);

glEnd();

}

///Road

glColor3ub(169,169,169);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,-0.1);

glVertex2f(-1,-4);

glVertex2f(1,-4);

glVertex2f(0.3,-0.1);

glVertex2f(-0.3,-0.1);

glEnd();

glColor3ub(169,169,169);

glBegin(GL\_POLYGON);

glVertex2f(0.3,-0.5);

glVertex2f(0.4,-1.5);

glVertex2f(5,-1.5);

glVertex2f(5,-0.5);

glVertex2f(0.3,-0.5);

glEnd();

///Road Lines

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-0.3);

glVertex2f(0,-0.6);

glEnd();

}

glLineWidth(5.2);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-0.9);

glVertex2f(0,-1.2);

glEnd();

}

glLineWidth(5.4);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-1.5);

glVertex2f(0,-1.8);

glEnd();

}

glLineWidth(5.6);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-2.1);

glVertex2f(0,-2.4);

glEnd();

}

glLineWidth(5.8);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-2.7);

glVertex2f(0,-3.0);

glEnd();

}

glLineWidth(6.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-3.3);

glVertex2f(0,-3.6);

glEnd();

}

glLineWidth(6.2);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-3.9);

glVertex2f(0,-4.2);

glEnd();

}

glLineWidth(6.4);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0,-4.5);

glVertex2f(0,-5.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.475,-1.0);

glVertex2f(0.775,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(1.1,-1.0);

glVertex2f(1.4,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(1.7,-1.0);

glVertex2f(2.0,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(2.3,-1.0);

glVertex2f(2.6,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(2.9,-1.0);

glVertex2f(3.2,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(3.5,-1.0);

glVertex2f(3.8,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(4.1,-1.0);

glVertex2f(4.4,-1.0);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(4.7,-1.0);

glVertex2f(5.0,-1.0);

glEnd();

}

///Zebracrossing

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.45,-0.9);

glVertex2f(0.75,-0.9);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.425,-0.8);

glVertex2f(0.725,-0.8);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.4,-0.7);

glVertex2f(0.7,-0.7);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.375,-0.6);

glVertex2f(0.675,-0.6);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.5,-1.1);

glVertex2f(0.8,-1.1);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.525,-1.2);

glVertex2f(0.825,-1.2);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.55,-1.3);

glVertex2f(0.85,-1.3);

glEnd();

}

glLineWidth(5.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(1.0f,1.0f,1.0f);

glVertex2f(0.575,-1.4);

glVertex2f(0.875,-1.4);

glEnd();

}

///Car

glPushMatrix();

glTranslatef(positionCar1,0.0f, 0.0f);

glBegin(GL\_QUADS); ///Car\_Body

{

glColor3f(1.0f,0.0f,0.0f);

glVertex2f(1.3f,-0.5f);

glVertex2f(1.3f,-0.7f);

glVertex2f(0.6f,-0.7f);

glVertex2f(0.6f,-0.5f);

glEnd();

}

glBegin(GL\_QUADS); ///Car\_Glass

{

glColor3f(0.0f, 0.0f, 1.0f);

glVertex2f(1.3f,-0.5);

glVertex2f(1.2f,-0.28f);

glVertex2f(0.7f,-0.28f);

glVertex2f(0.6f,-0.5f);

glEnd();

}

glLineWidth(1.2);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.3f,-0.5);

glVertex2f(1.2f,-0.28f);

glVertex2f(0.7f,-0.28f);

glVertex2f(0.6f,-0.5f);

glEnd();

}

glBegin(GL\_LINE\_LOOP);

{

glVertex2f(1.2f,-0.5);

glVertex2f(1.2f,-0.28f);

glVertex2f(0.7f,-0.28f);

glVertex2f(0.7f,-0.5f);

glEnd();

}

glColor3f(0.0f,0.0f,0.0f);

int ib;

GLfloat xb=1.15f; GLfloat yb=-.7f; GLfloat radiusb =.12f;

int triangleAmountb = 20;

GLfloat twicePib = 2.0f \* PI;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xb, yb);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xb + (radiusb \* cos(ib \* twicePib / triangleAmountb)),

yb + (radiusb \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glColor3f(0.0f,0.0f,0.0f);

int jb;

GLfloat pb=0.75f; GLfloat qb=-0.7f; GLfloat radb =.12f;

int triangleAmtb = 20;

GLfloat twicepib = 2.0f \* PI;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pb, qb);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pb + (radb \* cos(jb \* twicepib / triangleAmtb)),

qb + (radb \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

glColor3f(1.0f,1.0f,1.0f);

GLfloat radi =.09f;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xb, yb);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xb + (radi \* cos(ib \* twicePib / triangleAmountb)),

yb + (radi \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pb, qb);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pb + (radi \* cos(jb \* twicepib / triangleAmtb)),

qb + (radi \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

///Bus

glBegin(GL\_QUADS);

glColor3ub(179, 255, 102);

glVertex2f(2.7f,-0.7f);

glVertex2f(4.1f,-0.7f);

glVertex2f(4.1f,-0.5f);

glVertex2f(2.7f,-0.5f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(2.7f,-0.5f);

glVertex2f(4.1f,-0.5f);

glVertex2f(4.0f,0.0f);

glVertex2f(2.7f,0.0f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(0,0,128);

glVertex2f(3.8f,-0.5f);

glVertex2f(3.95f,-0.5f);

glVertex2f(3.95f,-0.2f);

glVertex2f(3.8f,-0.2f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(2.9f,-0.5f);

glVertex2f(3.1f,-0.5f);

glVertex2f(3.1f,-0.3f);

glVertex2f(2.9f,-0.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.2f,-0.5f);

glVertex2f(3.4f,-0.5f);

glVertex2f(3.4f,-0.3f);

glVertex2f(3.2f,-0.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.5f,-0.5f);

glVertex2f(3.7f,-0.5f);

glVertex2f(3.7f,-0.3f);

glVertex2f(3.5f,-0.3f);

glEnd();

////

glBegin(GL\_QUADS);

glVertex2f(2.6f,-0.2f);

glVertex2f(2.6f,-0.2f);

glVertex2f(2.8f,-0.1f);

glVertex2f(2.8f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(0,0,128);

glVertex2f(2.9f,-0.2f);

glVertex2f(3.1f,-0.2f);

glVertex2f(3.1f,-0.1f);

glVertex2f(2.9f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.2f,-0.2f);

glVertex2f(3.4f,-0.2f);

glVertex2f(3.4f,-0.1f);

glVertex2f(3.2f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(3.5f,-0.2f);

glVertex2f(3.7f,-0.2f);

glVertex2f(3.7f,-0.1f);

glVertex2f(3.5f,-0.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(0,139,139);

glVertex2f(4.0f,-0.3f);

glVertex2f(4.2f,-0.3f);

glVertex2f(4.2f,-0.5f);

glVertex2f(4.0f,-0.5f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(179, 255, 102);

glVertex2f(4.0f,-0.5f);

glVertex2f(4.2f,-0.5f);

glVertex2f(4.2f,-0.7f);

glVertex2f(4.0f,-0.7f);

glEnd();

glBegin(GL\_TRIANGLES);

glColor3ub(65,105,225);

glVertex2f(4.0f,0.0f);

glVertex2f(4.0f,-0.3f);

glVertex2f(4.2f,-0.3f);

glEnd();

///wheel

glColor3f(0,0,0);

GLfloat xbpr=3.0f; GLfloat ybpr=-0.7f,radbw=.13,radiw=.09;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xbpr, ybpr);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xbpr + (radbw \* cos(ib \* twicePib / triangleAmountb)),

ybpr + (radbw \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glColor3f(0,0,0);

GLfloat pbpt=3.8f; GLfloat qbpt=-0.7f;

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pbpt, qbpt);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pbpt + (radbw \* cos(jb \* twicepib / triangleAmtb)),

qbpt + (radbw \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

glColor3f(1,1,1);

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(xbpr, ybpr);

for(ib = 0; ib <= triangleAmountb;ib++)

{

glVertex2f(

xbpr + (radiw \* cos(ib \* twicePib / triangleAmountb)),

ybpr + (radiw \* sin(ib \* twicePib / triangleAmountb))

);

}

glEnd();

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(pbpt, qbpt);

for(jb = 0; jb <= triangleAmtb;jb++)

{

glVertex2f(

pbpt + (radiw \* cos(jb \* twicepib / triangleAmtb)),

qbpt + (radiw \* sin(jb \* twicepib / triangleAmtb))

);

}

glEnd();

glPopMatrix();

///Dome 0

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-0.3,1.4);

glVertex2f(-0.3,1.4);

glVertex2f(-0.2,1.625);

glVertex2f(-0.1,1.725);

glVertex2f(0.0,1.8);

glVertex2f(0.1,1.725);

glVertex2f(0.2,1.625);

glVertex2f(0.3,1.4);

glVertex2f(0.0,1.4);

glVertex2f(-0.3,1.4);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-0.3,1.4);

glVertex2f(-0.3,1.4);

glVertex2f(-0.2,1.625);

glVertex2f(-0.1,1.725);

glVertex2f(0.0,1.8);

glVertex2f(0.1,1.725);

glVertex2f(0.2,1.625);

glVertex2f(0.3,1.4);

glVertex2f(0.0,1.4);

glVertex2f(-0.3,1.4);

glEnd();

}

///Dome +1

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(0.350,1.375);

glVertex2f(0.4,1.5);

glVertex2f(0.5,1.6);

glVertex2f(0.6,1.65);

glVertex2f(0.7,1.7);

glVertex2f(0.8,1.65);

glVertex2f(0.9,1.6);

glVertex2f(1.0,1.465);

glVertex2f(1.050,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(0.350,1.375);

glVertex2f(0.4,1.5);

glVertex2f(0.5,1.6);

glVertex2f(0.6,1.65);

glVertex2f(0.7,1.7);

glVertex2f(0.8,1.65);

glVertex2f(0.9,1.6);

glVertex2f(1.0,1.465);

glVertex2f(1.050,1.325);

glEnd();

}

///Dome +2

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(1.1,1.325);

glVertex2f(1.125,1.4);

glVertex2f(1.2,1.5);

glVertex2f(1.4,1.6);

glVertex2f(1.55,1.5);

glVertex2f(1.65,1.4);

glVertex2f(1.7,1.285);

glVertex2f(1.1,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.1,1.325);

glVertex2f(1.125,1.4);

glVertex2f(1.2,1.5);

glVertex2f(1.4,1.6);

glVertex2f(1.55,1.5);

glVertex2f(1.65,1.4);

glVertex2f(1.7,1.285);

glVertex2f(1.1,1.325);

glEnd();

}

///Dome +3

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(1.775,1.265);

glVertex2f(1.9,1.445);

glVertex2f(2.1,1.55);

glVertex2f(2.2,1.475);

glVertex2f(2.285,1.4);

glVertex2f(2.3,1.4);

glVertex2f(2.4,1.225);

glVertex2f(1.775,1.265);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(1.775,1.265);

glVertex2f(1.9,1.445);

glVertex2f(2.1,1.55);

glVertex2f(2.2,1.475);

glVertex2f(2.285,1.4);

glVertex2f(2.3,1.4);

glVertex2f(2.4,1.225);

glVertex2f(1.775,1.265);

glEnd();

}

///Dome +4

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(2.5,1.215);

glVertex2f(2.605,1.335);

glVertex2f(2.8,1.45);

glVertex2f(2.975,1.335);

glVertex2f(3.1,1.165);

glVertex2f(2.5,1.215);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(2.5,1.215);

glVertex2f(2.605,1.335);

glVertex2f(2.8,1.45);

glVertex2f(2.975,1.335);

glVertex2f(3.1,1.165);

glVertex2f(2.5,1.215);

glEnd();

}

///Dome +5

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(3.21,1.2);

glVertex2f(3.35,1.32);

glVertex2f(3.5,1.4);

glVertex2f(3.65,1.32);

glVertex2f(3.8,1.115);

glVertex2f(3.2,1.175);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.21,1.2);

glVertex2f(3.35,1.32);

glVertex2f(3.5,1.4);

glVertex2f(3.65,1.32);

glVertex2f(3.8,1.115);

glVertex2f(3.2,1.175);

glEnd();

}

///Dome -1

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-0.350,1.375);

glVertex2f(-0.4,1.5);

glVertex2f(-0.5,1.6);

glVertex2f(-0.6,1.65);

glVertex2f(-0.7,1.7);

glVertex2f(-0.8,1.65);

glVertex2f(-0.9,1.6);

glVertex2f(-1.0,1.465);

glVertex2f(-1.050,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-0.350,1.375);

glVertex2f(-0.4,1.5);

glVertex2f(-0.5,1.6);

glVertex2f(-0.6,1.65);

glVertex2f(-0.7,1.7);

glVertex2f(-0.8,1.65);

glVertex2f(-0.9,1.6);

glVertex2f(-1.0,1.465);

glVertex2f(-1.050,1.325);

glEnd();

}

///Dome -2

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-1.1,1.325);

glVertex2f(-1.125,1.4);

glVertex2f(-1.2,1.5);

glVertex2f(-1.4,1.6);

glVertex2f(-1.55,1.5);

glVertex2f(-1.65,1.4);

glVertex2f(-1.7,1.285);

glVertex2f(-1.1,1.325);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1.1,1.325);

glVertex2f(-1.125,1.4);

glVertex2f(-1.2,1.5);

glVertex2f(-1.4,1.6);

glVertex2f(-1.55,1.5);

glVertex2f(-1.65,1.4);

glVertex2f(-1.7,1.285);

glVertex2f(-1.1,1.325);

glEnd();

}

///Dome -3

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-1.775,1.265);

glVertex2f(-1.9,1.445);

glVertex2f(-2.1,1.55);

glVertex2f(-2.2,1.475);

glVertex2f(-2.285,1.4);

glVertex2f(-2.3,1.4);

glVertex2f(-2.4,1.225);

glVertex2f(-1.775,1.265);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-1.775,1.265);

glVertex2f(-1.9,1.445);

glVertex2f(-2.1,1.55);

glVertex2f(-2.2,1.475);

glVertex2f(-2.285,1.4);

glVertex2f(-2.3,1.4);

glVertex2f(-2.4,1.225);

glVertex2f(-1.775,1.265);

glEnd();

}

///Dome -4

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-2.5,1.215);

glVertex2f(-2.605,1.335);

glVertex2f(-2.8,1.45);

glVertex2f(-2.975,1.335);

glVertex2f(-3.1,1.165);

glVertex2f(-2.5,1.215);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-2.5,1.215);

glVertex2f(-2.605,1.335);

glVertex2f(-2.8,1.45);

glVertex2f(-2.975,1.335);

glVertex2f(-3.1,1.165);

glVertex2f(-2.5,1.215);

glEnd();

}

///Dome -5

glColor3ub(160,82,45);

glBegin(GL\_POLYGON);

glVertex2f(-3.21,1.2);

glVertex2f(-3.35,1.32);

glVertex2f(-3.5,1.4);

glVertex2f(-3.65,1.32);

glVertex2f(-3.8,1.115);

glVertex2f(-3.2,1.175);

glEnd();

///Border

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.21,1.2);

glVertex2f(-3.35,1.32);

glVertex2f(-3.5,1.4);

glVertex2f(-3.65,1.32);

glVertex2f(-3.8,1.115);

glVertex2f(-3.2,1.175);

glEnd();

}

///Sand

glColor3ub(192,192,192);

glBegin(GL\_POLYGON);

glVertex2f(-5,-1);

glVertex2f(-3.5,-1);

glVertex2f(-3.7,-1.2);

glVertex2f(-5,-1.2);

glVertex2f(-5,-1);

glEnd();

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-5,-1);

glVertex2f(-3.5,-1);

glVertex2f(-3.7,-1.2);

glVertex2f(-5,-1.2);

glVertex2f(-5,-1);

glEnd();

}

glColor3ub(192,192,192);

glBegin(GL\_POLYGON);

glVertex2f(-3.5,-1);

glVertex2f(-5,-2.5);

glVertex2f(-5,-2.7);

glVertex2f(-3.5,-1.2);

glVertex2f(-3.5,-1);

glEnd();

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-1);

glVertex2f(-5,-2.5);

glVertex2f(-5,-2.7);

glVertex2f(-3.5,-1.2);

glVertex2f(-3.5,-1);

glEnd();

}

glColor3ub(222,184,135);

glBegin(GL\_POLYGON);

glVertex2f(-5,-1.2);

glVertex2f(-3.7,-1.2);

glVertex2f(-5,-2.5);

glVertex2f(-5,-1.2);

glEnd();

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.9,-1);

glVertex2f(-4.9,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.8,-1);

glVertex2f(-4.8,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.7,-1);

glVertex2f(-4.7,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,-1);

glVertex2f(-4.6,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.5,-1);

glVertex2f(-4.5,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.4,-1);

glVertex2f(-4.4,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.3,-1);

glVertex2f(-4.3,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.2,-1);

glVertex2f(-4.2,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.1,-1);

glVertex2f(-4.1,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,-1);

glVertex2f(-4,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,-1);

glVertex2f(-3.9,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.8,-1);

glVertex2f(-3.8,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.7,-1);

glVertex2f(-3.7,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.6,-1);

glVertex2f(-3.6,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-1);

glVertex2f(-3.5,-0.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.9,-2.4);

glVertex2f(-4.9,-2.1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.8,-2.3);

glVertex2f(-4.8,-2.0);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.7,-2.2);

glVertex2f(-4.7,-1.9);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.6,-2.1);

glVertex2f(-4.6,-1.8);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.5,-2);

glVertex2f(-4.5,-1.7);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.4,-1.9);

glVertex2f(-4.4,-1.6);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.3,-1.8);

glVertex2f(-4.3,-1.5);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.2,-1.7);

glVertex2f(-4.2,-1.4);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4.1,-1.6);

glVertex2f(-4.1,-1.3);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-4,-1.5);

glVertex2f(-4,-1.2);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.9,-1.4);

glVertex2f(-3.9,-1.1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.8,-1.3);

glVertex2f(-3.8,-1);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.7,-1.2);

glVertex2f(-3.7,-0.9);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.6,-1.1);

glVertex2f(-3.6,-0.8);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-5,-0.9);

glVertex2f(-3.5,-0.9);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-5,-0.8);

glVertex2f(-3.5,-0.8);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-0.8);

glVertex2f(-5,-2.3);

glEnd();

}

glLineWidth(1.5);

glBegin(GL\_LINE\_LOOP);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(-3.5,-0.9);

glVertex2f(-5,-2.4);

glEnd();

}

///Light 1

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(-0.5f,-0.9f);

glVertex2f(-0.6f,-0.9f);

glVertex2f(-0.6f,-0.3f);

glVertex2f(-0.5f,-0.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(-0.5f,-0.4f);

glVertex2f(-0.3f,-0.4f);

glVertex2f(-0.3f,-0.3f);

glVertex2f(-0.5f,-0.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(-0.4f,-0.5f);

glVertex2f(-0.2f,-0.5f);

glVertex2f(-0.3f,-0.4f);

glEnd();

///Light 2

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(-0.7f,-1.9f);

glVertex2f(-0.8f,-1.9f);

glVertex2f(-0.8f,-1.3f);

glVertex2f(-0.7f,-1.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(-0.7f,-1.4f);

glVertex2f(-0.5f,-1.4f);

glVertex2f(-0.5f,-1.3f);

glVertex2f(-0.7f,-1.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(-0.6f,-1.5f);

glVertex2f(-0.4f,-1.5f);

glVertex2f(-0.5f,-1.4f);

glEnd();

///Light 3

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(-0.85f,-2.9f);

glVertex2f(-0.95f,-2.9f);

glVertex2f(-0.95f,-2.3f);

glVertex2f(-0.85f,-2.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(-0.85f,-2.4f);

glVertex2f(-0.65f,-2.4f);

glVertex2f(-0.65f,-2.3f);

glVertex2f(-0.85f,-2.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(-0.75f,-2.5f);

glVertex2f(-0.55f,-2.5f);

glVertex2f(-0.65f,-2.4f);

glEnd();

///Light 4

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(0.65f,-1.9f);

glVertex2f(0.75f,-1.9f);

glVertex2f(0.75f,-1.3f);

glVertex2f(0.65f,-1.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(0.65f,-1.4f);

glVertex2f(0.45f,-1.4f);

glVertex2f(0.45f,-1.3f);

glVertex2f(0.65f,-1.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(0.55f,-1.5f);

glVertex2f(0.35f,-1.5f);

glVertex2f(0.45f,-1.4f);

glEnd();

///Light 5

glColor3ub(214, 214, 194);

glBegin(GL\_QUADS);

glVertex2f(0.85f,-2.9f);

glVertex2f(0.95f,-2.9f);

glVertex2f(0.95f,-2.3f);

glVertex2f(0.85f,-2.3f);

glEnd();

glBegin(GL\_QUADS);

glVertex2f(0.85f,-2.4f);

glVertex2f(0.65f,-2.4f);

glVertex2f(0.65f,-2.3f);

glVertex2f(0.85f,-2.3f);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(0.75f,-2.5f);

glVertex2f(0.55f,-2.5f);

glVertex2f(0.65f,-2.4f);

glEnd();

///Light 6

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(1.65f,-1.7f);

glVertex2f(1.75f,-1.7f);

glVertex2f(1.75f,-1.1f);

glVertex2f(1.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(1.65f,-1.1f);

glVertex2f(1.75f,-1.1f);

glVertex2f(1.65f,-0.9f);

glVertex2f(1.55f,-0.9f);

glEnd();

///Light 7

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(2.65f,-1.7f);

glVertex2f(2.75f,-1.7f);

glVertex2f(2.75f,-1.1f);

glVertex2f(2.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(2.65f,-1.1f);

glVertex2f(2.75f,-1.1f);

glVertex2f(2.65f,-0.9f);

glVertex2f(2.55f,-0.9f);

glEnd();

///Light 8

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(3.65f,-1.7f);

glVertex2f(3.75f,-1.7f);

glVertex2f(3.75f,-1.1f);

glVertex2f(3.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(3.65f,-1.1f);

glVertex2f(3.75f,-1.1f);

glVertex2f(3.65f,-0.9f);

glVertex2f(3.55f,-0.9f);

glEnd();

///Light 9

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(4.65f,-1.7f);

glVertex2f(4.75f,-1.7f);

glVertex2f(4.75f,-1.1f);

glVertex2f(4.65f,-1.1f);

glEnd();

glBegin(GL\_QUADS);

glColor3ub(214, 214, 194);

glVertex2f(4.65f,-1.1f);

glVertex2f(4.75f,-1.1f);

glVertex2f(4.65f,-0.9f);

glVertex2f(4.55f,-0.9f);

glEnd();

///Birds

glPushMatrix();

glTranslatef(positionBird,positionBird, 0.0f);

glLineWidth(3.0);

glBegin(GL\_LINES);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.0,2.2);

glVertex2f(3.1,2.1);

glVertex2f(3.2,2.3);

glVertex2f(3.1,2.1);

glVertex2f(3.2,2.3);

glEnd();

}

glLineWidth(3.0);

glBegin(GL\_LINES);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.4,2.3);

glVertex2f(3.5,2.2);

glVertex2f(3.6,2.4);

glVertex2f(3.5,2.2);

glVertex2f(3.6,2.4);

glEnd();

}

glLineWidth(3.0);

glBegin(GL\_LINES);

{

glColor3f(0.0f,0.0f,0.0f);

glVertex2f(3.2,2.5);

glVertex2f(3.3,2.4);

glVertex2f(3.4,2.6);

glVertex2f(3.3,2.4);

glVertex2f(3.4,2.6);

glEnd();

}

glPopMatrix();

glutTimerFunc(10000,displayDayToNight,0);

glFlush ();

}

void myInit (void)

{

glClearColor(1.0, 1.0, 1.0, 0.0);

glColor3f(0.0f, 0.0f, 0.0f);

glPointSize(4.0);

glMatrixMode(GL\_PROJECTION);

glLoadIdentity();

}

int main(int argc, char\*\* argv)

{

glutInit(&argc, argv);

glutInitDisplayMode (GLUT\_SINGLE | GLUT\_RGB);

glutInitWindowSize(1600,960);

glutCreateWindow ("60 DOME MOSQUE");

glutDisplayFunc(myDisplayDay);

myInit ();

glutTimerFunc(100, updateCar1, 0);

glutTimerFunc(1, updateCloud, 0);

glutTimerFunc(1, updateSun, 0);

glutTimerFunc(1, updateMoon, 0);

glutTimerFunc(1, updateBird, 0);

glutKeyboardFunc(handleKeypress);

glutMouseFunc(handleMouse);

glutMainLoop();

return 0;

}