#include <GL/glut.h>

#include <math.h>

#include<stdio.h>

int boatStatus1 = 1;

const GLfloat deg2Rad = 3.14159/180;

int sc=4;

int cloudStatus = 1;

int sunStatus = 1;

int waterStatus = 1;

float boatX1 = 0;

float boatY1 = 0;

int boatfarStatus1=1;

float boatfarX1=0;

float boatfarY1=0;

int boatfarStatus2=1;

float boatfarX2=500;

float boatfarY2=0;

float sunX = 0;

float sunY = 0;

float cloudX = 0;

float cloudY = 0;

float waterX=0;

float waterY=0;

int ballstatus=1;

float ballX = 0;

float ballY = 0;

float fserveX=0;

float fserveY = 0;

int middlemanStatus=0;

float middlepassX=0;

float middlepassY=0;

int kitestatus=0;

float kiteX=0;

float kiteY=0;

int speakerstatus=0;

float speaker1X=0;

float speaker1Y=0;

int curtainstatus=0;

float curtainY=0;

void bmap(float x,float y,unsigned char str[])

{

int i=0;

glRasterPos2f(x,y);

glColor3f(1,.5,0);

int l = strlen(str);

for( i = 0; i < l; i++) {

glutBitmapCharacter(GLUT\_BITMAP\_TIMES\_ROMAN\_24, str[i]);

}

}

void DrawCircle(float cx, float cy, float r, int num\_segments){

glBegin(GL\_TRIANGLE\_FAN);

int i;

for( i = 0; i < num\_segments; i++)

{

float theta = 2.0f \* 3.1415926f \* (i) / (num\_segments);//get the current angle

float x = r \* cosf(theta);//calculate the x component

float y = r \* sinf(theta);//calculate the y component

glVertex2f(x + cx, y + cy);//output vertex

}

glEnd();

}

void circle(float xrad,float yrad){

GLint i;

glBegin(GL\_POLYGON);

for(i=0;i<360;i++){

float degInRad = i\*deg2Rad;

glVertex2f(cos(degInRad)\*xrad,sin(degInRad)\*yrad);

}

glEnd();

}

void drawXLine(int x1,int x2,int y1,int y2,float width) {

glLineWidth(width);

glBegin(GL\_LINES);

glVertex2f(x1, y1);

glVertex2f(x2, y2);

glEnd();

glBegin(GL\_LINES);

glVertex2f(x2, y1);

glVertex2f(x1, y2);

glEnd();

}

void drawLine(int x,int y1,int y2,float width) {

glLineWidth(width);

glBegin(GL\_LINES);

glVertex2f(x, y1);

glVertex2f(x, y2);

glEnd();

}

void drawSun(int x)

{

glColor3f(3.0, 1.0, 0.5);

DrawCircle(800, 1000, 70, 1000);

}

void cloud(int x)

{

glColor3f(1.0, 1.0, 1.0);

DrawCircle(100, 1300, 60, 2000);//1

DrawCircle(200,1300, 80, 2000);//2

DrawCircle(300, 1300, 55, 2000);//3

DrawCircle(700, 1300, 60, 2000);//1

DrawCircle(800,1300, 80, 2000);//2

DrawCircle(900, 1300, 55, 2000);//3

DrawCircle(1100, 1300, 60, 2000);//1

DrawCircle(1200,1300, 80, 2000);//2

DrawCircle(1300, 1300, 55, 2000);//3

DrawCircle(1700, 1300, 60, 2000);//1

DrawCircle(1800,1300, 80, 2000);//2

DrawCircle(1900, 1300, 55, 2000);//3

}

void movingCloud()

{

if (cloudStatus == 1)

{

cloudX +=.5;

}

if (cloudX>2000)

{

cloudX = -200;

}

glPushMatrix();

glTranslatef(cloudX, cloudY, 0);

cloud(1);

glPopMatrix();

}

void moveSun()

{

if(sunStatus == 1)

{

if (sunY>=350)

sunY=350;

else

sunY += .5;

}

glPushMatrix();

glTranslatef(sunX, sunY, 0);

drawSun(1);

glPopMatrix();

}

void sky(){

glBegin(GL\_POLYGON); //Sky

glColor3f(0.4, 0.5, 1.0);

glVertex2i(0, 1500);

glVertex2i(2000, 1500);

glColor3f(0.7, 0.7, 1.0);

glVertex2i(2000, 0);

glVertex2i(0, 0);

glEnd();

}

void skynight(){

glBegin(GL\_POLYGON); //Sky

glColor3f(0,0,0);

glVertex2i(0, 1500);

glVertex2i(2000, 1500);

glColor3f(0.7, 0.7, 1.0);

glVertex2i(2000, 0);

glVertex2i(0, 0);

glEnd();

}

void ocean(){

glBegin(GL\_POLYGON); // Ocean

glColor3f(0.2, 0.3, 1.1);

glVertex2i(0, 600);

glVertex2i(550, 400);

glVertex2i(2000, 300);

glVertex2i(2000, 1150);

glVertex2i(0, 1150);

glEnd();

}

void volleyball() {

glBegin(GL\_LINE\_STRIP);

glColor3f(0, 0,0);

glVertex2i(900, 440);

glVertex2i(900, 330);

glVertex2i(1000, 640);

glVertex2i(1000, 730);

glVertex2i(900, 440);

glEnd();

glBegin(GL\_LINES);

glColor3f(0, 0,0);

glVertex2i(900, 330);

glVertex2i(900, 300);

glEnd();

glBegin(GL\_LINES);

glColor3f(0, 0,0);

glVertex2i(1000, 640);

glVertex2i(1000, 600);

glEnd();

glLineWidth(1);

glBegin(GL\_LINE\_STRIP);

glVertex2i(370, 300);

glVertex2i(1400, 300);

glVertex2i(1500, 600);

glVertex2i(550, 600);

glVertex2i(370, 300);

glEnd();

}

void drawmovingwater(){

int x=0,y=0.01;

glBegin(GL\_POLYGON); //Middle ground

glColor3ub(194, 178, 128);

glVertex2i(0, 0);

glVertex2i(2100,0);

glVertex2i(2100, 200+600);

glVertex2i(1100,0);

glColor3ub(194, 178, 128);

glVertex2i(0,0);

glVertex2i(2100, 600+200);

glVertex2i(650, 600+200);

glVertex2i(0, 600+200);

glEnd();

}

void curtain() {

if(curtainstatus==1) {

if(curtainY>=340){

curtainY = 340;

curtainstatus=0;

}else {

curtainY +=.5;

}

}

glPushMatrix();

glTranslatef(0,curtainY,0);

glColor3f(1,0,0);

glBegin(GL\_POLYGON);

glVertex2i(865, 780);

glVertex2i(865, 455);

glVertex2i(1260, 455);

glVertex2i(1260, 780);

glEnd();

glPopMatrix();

}

void stage() {

glBegin(GL\_POLYGON);

glColor3f(0, 0, 0);

glVertex2i(750, 780);

glVertex2i(1380, 780);

glVertex2i(1350, 750);

glVertex2i(780, 750);

glEnd();

glBegin(GL\_POLYGON);

glColor3f(.6, .2, .3);

glVertex2i(780, 750);

glVertex2i(1350, 750);

glVertex2i(1320, 730);

glVertex2i(800, 730);

glEnd();

glColor3f(1, 0.5, 0);

drawLine(820, 730, 450, 5);

drawLine(860, 730, 450, 5);

glColor3f(0, 0, 0);

int x = 730;

int i;

for ( i = 0; i < 9; i++) {

drawXLine(825, 857, x, x - 30, 2.5);

x = x - 30;

}

glColor3f(1, 0.5, 0);

drawLine(1300, 730, 450, 5);

drawLine(1260, 730, 450, 5);

glColor3f(0, 0, 0);

x = 730;

for (i = 0; i < 9; i++) {

drawXLine(1263, 1297, x, x - 30, 2.5);

x = x - 30;

}

glColor3f(0, 0.5, 0);

glBegin(GL\_POLYGON);

glVertex2i(750, 450);

glVertex2i(1350, 450);

glVertex2i(1350, 380);

glVertex2i(750, 380);

glEnd();

glColor3f(0, 0, 0);

//mic

glLineWidth(2.5);

glBegin(GL\_LINES);

glVertex2f(1040, 452);

glVertex2f(1060, 452);

glEnd();

glBegin(GL\_LINES);

glVertex2f(1050, 450);

glVertex2f(1050, 500);

glEnd();

glBegin(GL\_LINES);

glVertex2f(1030, 480);

glVertex2f(1070, 520);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1070, 515);

glVertex2i(1078, 520);

glVertex2i(1078, 530);

glVertex2i(1070, 525);

glEnd();

if (speakerstatus == 1) {

if (speaker1Y >= 5) {

speaker1Y=5;

speakerstatus = 2;

} else {

speaker1Y+=.03;

}

}

if(speakerstatus==2){

if(speaker1Y<=0){

speaker1Y=0;

speakerstatus = 1;

} else {

speaker1Y-=.03;

}

}

glPushMatrix();

glTranslatef(speaker1X,speaker1Y,0);

//speaker 1

glBegin(GL\_POLYGON);

glVertex2i(650,530);

glVertex2i(720,530);

glVertex2i(720,380);

glVertex2i(650,380);

glEnd();

glColor3f(1,1,1);

DrawCircle(683,500,10,1000);

glColor3f(0,0,0);

DrawCircle(683,500,8,1000);

glColor3f(1,1,1);

DrawCircle(683,420,20,1000);

glColor3f(0,0,0);

DrawCircle(683,420,17,1000);

//speaker 2

glBegin(GL\_POLYGON);

glVertex2i(650+720,530);

glVertex2i(720+720,530);

glVertex2i(720+720,380);

glVertex2i(650+720,380);

glEnd();

glColor3f(1,1,1);

DrawCircle(683+720,500,10,1000);

glColor3f(0,0,0);

DrawCircle(683+720,500,8,1000);

glColor3f(1,1,1);

DrawCircle(683+720,420,20,1000);

glColor3f(0,0,0);

DrawCircle(683+720,420,17,1000);

glPopMatrix();

}

void sand() {

//water wave looping

if(waterStatus == 1)

{

if (waterY<=-100){

waterY=-100;

waterStatus = 0;

}

else

waterY -= .05;

}

if(waterStatus == 0){

if (waterY>=0){

waterY=0;

waterStatus = 1;

}

else

waterY += .05;

}

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glPushMatrix();

glTranslatef(waterX,waterY,0);

drawmovingwater();

glPopMatrix();

}

void human(){

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(245,410);

glVertex2i(220,385);

glEnd();

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(275,410);

glVertex2i(300,385);

glEnd();

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(275,410);

glVertex2i(300,385);

glEnd();

glColor3f(0.0,2.5,1.5);

glPushMatrix();

glTranslatef(220,420,0);

glScalef(1.0,1.0,0);

glutSolidSphere(9,100,100);

glPopMatrix();

//stick();

glColor3f(0.0,2.5,1.5);

glPushMatrix();

glTranslatef(300,420,0);

glScalef(1.0,1.0,0);

glutSolidSphere(9,100,100);

glPopMatrix();

//stick1();

}

void drawCircleBall(GLfloat x, GLfloat y, GLfloat r,GLfloat width) {

static const double inc = M\_PI / 12;

static const double max = 2 \* M\_PI;

glLineWidth(width);

glBegin(GL\_POLYGON);

double d;

for(d = 0; d < max; d += inc) {

glVertex2f(cos(d) \* r + x, sin(d) \* r + y);

}

glEnd();

}

void drawCircleOutline(GLfloat x, GLfloat y, GLfloat r,GLfloat width) {

static const double inc = M\_PI / 12;

static const double max = 2 \* M\_PI;

glLineWidth(width);

glBegin(GL\_LINE\_LOOP);

double d;

for( d = 0; d < max; d += inc) {

glVertex2f(cos(d) \* r + x, sin(d) \* r + y);

}

glEnd();

}

void leftHand(int x,int y){

glBegin(GL\_LINES);

glVertex2i(x,y-21);

glVertex2i(x-16,y-31);

glEnd();

}

void rightHand(int x,int y){

glBegin(GL\_LINES);

glVertex2i(x,y-21);

glVertex2i(x+18,y-31);

glEnd();

}

void leftLeg(int x,int y){

glBegin(GL\_LINES);

glVertex2i(x,y-51);

glVertex2i(x-16,y-61);

glEnd();

}

void rightLeg(int x,int y){

glBegin(GL\_LINES);

glVertex2i(x,y-51);

glVertex2i(x+18,y-61);

glEnd();

}

void stickman(GLfloat x,GLfloat y,GLfloat r){

glColor3f(0,0,0);

glPushMatrix();

drawCircleOutline(x,y,10,1);

glPopMatrix();

glLineWidth(1);

glBegin(GL\_LINES);

glVertex2i(x,y-8);

glVertex2i(x,y-51);

glEnd();

leftHand(x,y);

rightHand(x,y);

leftLeg(x,y);

rightLeg(x,y);

}

void man2(float x, float y) {

glColor3f(1.0,0.90,0.85);

DrawCircle(x,y+60,25,1000);

//eye

drawCircleOutline(x+20,y+40,5,1);

//Hair

glColor3f(0.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-25,y+55);

glVertex2f(x-25,y+65);

glVertex2f(x-15,y+95);

glVertex2f(x+25,y+95);

glVertex2f(x+25,y+75);

glVertex2f(x+25,y+90);

glEnd();

//right hand

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x+5,y+15);

glVertex2f(x+5,y+25);

glVertex2f(x+25,y+15);

glVertex2f(x+25,y+5);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x+20,y+5);

glVertex2f(x+20,y+15);

glVertex2f(x+35,y+30);

glVertex2f(x+35,y+20);

glEnd();

//neck

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x-5.0,y+100.0-80);

glVertex2f(x-5.0,y+120.0-80);

glVertex2f(x+5.0,y+120.0-80);

glVertex2f(x+5.0,y+100.0-80);

glEnd();

//mouth

glColor3f(0.0,0.0,0.0);

glBegin(GL\_LINE\_STRIP);

glVertex2f(x+15,y+43);

glVertex2f(x+10,y+43);

glVertex2f(x+10,y+45);

glEnd();

//nose

glBegin(GL\_LINE\_STRIP);

glVertex2f(x+20,y+50);

glVertex2f(x+20,y+55);

glVertex2f(x+25,y+60);

glEnd();

glBegin(GL\_LINE\_STRIP);

glVertex2f(x-5,y+65);

glVertex2f(x-10,y+65);

glVertex2f(x-10,y+55);

glVertex2f(x-5,y+55);

glEnd();

glBegin(GL\_LINES);

glVertex2f(x-10,y+60);

glVertex2f(x-5,y+60);

glEnd();

//eye

drawCircleBall(x+15,y+65,3,1);

//shirt

glColor3f(0.8,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-40);

glVertex2f(x-15,y+75-60);

glVertex2f(x-2,y+100-70);

glVertex2f(x+2,y+100-70);

glVertex2f(x+15,y+75-60);

glVertex2f(x+15,y-40);

glEnd();

//pant

glColor3f(0.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-50);

glVertex2f(x-15,y-25);

glVertex2f(x+15,y-25);

glVertex2f(x+15,y-50);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-80);

glVertex2f(x-15,y-50);

glVertex2f(x-2,y-50);

glVertex2f(x-2,y-80);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x+4,y-80);

glVertex2f(x+4,y-50);

glVertex2f(x+15,y-50);

glVertex2f(x+15,y-80);

glEnd();

glColor3f(1.0,0.90,0.85);

//lefthand

glBegin(GL\_POLYGON);

glVertex2f(x,y);

glVertex2f(x,y+10);

glVertex2f(x+30,y);

glVertex2f(x+30,y-10);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x+30,y-10);

glVertex2f(x+30,y);

glVertex2f(x+45,y+15);

glVertex2f(x+45,y+5);

glEnd();

//left fist

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x+65-27,y+95-88);

glVertex2f(x+65-27,y+105-88);

glVertex2f(x+75-27,y+105-88);

glVertex2f(x+75-27,y+95-88);

glEnd();

glColor3f(0.0,0.0,0.0);

glBegin(GL\_LINES);

glVertex2f(x+65-27,y+105-88);

glVertex2f(x+65-27,y+100-88);

glVertex2f(x+67.5-27,y+105-88);

glVertex2f(x+67.5-27,y+100-88);

glVertex2f(x+70-27,y+105-88);

glVertex2f(x+70-27,y+100-88);

glVertex2f(x+72.5-27,y+105-88);

glVertex2f(x+72.5-27,y+100-88);

glVertex2f(x+74.5-27,y+105-88);

glVertex2f(x+74.5-27,y+100-88);

glEnd();

//Right fist

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x+80-45,y+85-66);

glVertex2f(x+80-45,y+105-66);

glVertex2f(x+90-45,y+105-66);

glVertex2f(x+90-45,y+95-66);

glEnd();

glColor3f(0.0,0.0,0.0);

glBegin(GL\_LINES);

glVertex2f(x+80-45,y+105-66);

glVertex2f(x+80-45,y+100-66);

glVertex2f(x+82.5-45,y+105-66);

glVertex2f(x+82.5-45,y+100-66);

glVertex2f(x+85-45,y+105-66);

glVertex2f(x+85-45,y+100-66);

glVertex2f(x+87-45,y+105-66);

glVertex2f(x+87-45,y+100-66);

glVertex2f(x+89.5-45,y+105-66);

glVertex2f(x+89.5-45,y+100-66);

glEnd();

glColor3f(1.0,0.90,0.85);

//leg left

drawCircleBall(x-10,y-80,8,1);

//leg right

drawCircleBall(x+10,y-80,8,1);

}

void man3(float x, float y,float r, float g,float b) {

glColor3f(1.0,0.90,0.85);

DrawCircle(x,y+60,25,1000);

//eye

drawCircleOutline(x+20,y+40,5,1);

//Hair

glColor3f(0,0,0);

glBegin(GL\_POLYGON);

glVertex2f(x+25,y+55);

glVertex2f(x+25,y+65);

glVertex2f(x+15,y+95);

glVertex2f(x-25,y+95);

glVertex2f(x-25,y+75);

glVertex2f(x-25,y+90);

glEnd();

//right hand

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x-5,y+15);

glVertex2f(x-5,y+25);

glVertex2f(x-25,y+15);

glVertex2f(x-25,y+5);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x-20,y+5);

glVertex2f(x-20,y+15);

glVertex2f(x-35,y+30);

glVertex2f(x-35,y+20);

glEnd();

//neck

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x-5.0,y+100.0-80);

glVertex2f(x-5.0,y+120.0-80);

glVertex2f(x+5.0,y+120.0-80);

glVertex2f(x+5.0,y+100.0-80);

glEnd();

//mouth

glColor3f(0.0,0.0,0.0);

glBegin(GL\_LINE\_STRIP);

glVertex2f(x-15,y+43);

glVertex2f(x-10,y+43);

glVertex2f(x-10,y+45);

glEnd();

//nose

glBegin(GL\_LINE\_STRIP);

glVertex2f(x-20,y+50);

glVertex2f(x-20,y+55);

glVertex2f(x-25,y+60);

glEnd();

glBegin(GL\_LINE\_STRIP);

glVertex2f(x+5,y+65);

glVertex2f(x+10,y+65);

glVertex2f(x+10,y+55);

glVertex2f(x+5,y+55);

glEnd();

glBegin(GL\_LINES);

glVertex2f(x+10,y+60);

glVertex2f(x+5,y+60);

glEnd();

//eye

drawCircleBall(x-15,y+65,3,1);

//shirt

glColor3f(r,g,b);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-40);

glVertex2f(x-15,y+75-60);

glVertex2f(x-2,y+100-70);

glVertex2f(x+2,y+100-70);

glVertex2f(x+15,y+75-60);

glVertex2f(x+15,y-40);

glEnd();

//pant

glColor3f(0.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-50);

glVertex2f(x-15,y-25);

glVertex2f(x+15,y-25);

glVertex2f(x+15,y-50);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-80);

glVertex2f(x-15,y-50);

glVertex2f(x-2,y-50);

glVertex2f(x-2,y-80);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x+4,y-80);

glVertex2f(x+4,y-50);

glVertex2f(x+15,y-50);

glVertex2f(x+15,y-80);

glEnd();

glColor3f(1.0,0.90,0.85);

//lefthand

glBegin(GL\_POLYGON);

glVertex2f(x,y);

glVertex2f(x,y+10);

glVertex2f(x-30,y);

glVertex2f(x-30,y-10);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x-30,y-10);

glVertex2f(x-30,y);

glVertex2f(x-45,y+15);

glVertex2f(x-45,y+5);

glEnd();

//left fist

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x-65+27,y+95-88);

glVertex2f(x-65+27,y+105-88);

glVertex2f(x-75+27,y+105-88);

glVertex2f(x-75+27,y+95-88);

glEnd();

glColor3f(0.0,0.0,0.0);

glBegin(GL\_LINES);

glVertex2f(x-65+27,y+105-88);

glVertex2f(x-65+27,y+100-88);

glVertex2f(x-67.5+27,y+105-88);

glVertex2f(x-67.5+27,y+100-88);

glVertex2f(x-70+27,y+105-88);

glVertex2f(x-70+27,y+100-88);

glVertex2f(x-72.5+27,y+105-88);

glVertex2f(x-72.5+27,y+100-88);

glVertex2f(x-74.5+27,y+105-88);

glVertex2f(x-74.5+27,y+100-88);

glEnd();

//Right fist

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x-80+45,y+85-66);

glVertex2f(x-80+45,y+105-66);

glVertex2f(x-90+45,y+105-66);

glVertex2f(x-90+45,y+95-66);

glEnd();

glColor3f(0.0,0.0,0.0);

glBegin(GL\_LINES);

glVertex2f(x-80+45,y+105-66);

glVertex2f(x-80+45,y+100-66);

glVertex2f(x-82.5+45,y+105-66);

glVertex2f(x-82.5+45,y+100-66);

glVertex2f(x-85+45,y+105-66);

glVertex2f(x-85+45,y+100-66);

glVertex2f(x-87+45,y+105-66);

glVertex2f(x-87+45,y+100-66);

glVertex2f(x-89.5+45,y+105-66);

glVertex2f(x-89.5+45,y+100-66);

glEnd();

glColor3f(1.0,0.90,0.85);

//leg left

drawCircleBall(x-10,y-80,8,1);

//leg right

drawCircleBall(x+10,y-80,8,1);

}

void stall() {

glBegin(GL\_POLYGON);//stall body

glColor3f(1,0.5,0);

glVertex2i(400,200);

glVertex2i(120,200);

glVertex2i(120,350);

glVertex2i(400,350);

glEnd();

int x = 120,y1=200,y2=350;

glColor3f(1.0, 0.0, 0.0);

int i;

for( i=0;i<13;i++) {

x=x+20;

drawLine(x,y1,y2,2.5);

}

drawLine(130,350,500,2.5);

drawLine(390,350,500,2.5);

glBegin(GL\_TRIANGLES);//roof

glColor3f(0.1, 0.2, 0.3);

glVertex2i(120, 500);

glVertex2i(260, 550);

glVertex2i(400, 500);

glEnd();

glBegin(GL\_POLYGON);

glColor3f(1,1,1);

glVertex2i(400-40,200+50);

glVertex2i(120+40,200+50);

glVertex2i(120+40,350-50);

glVertex2i(400-40,350-50);

glEnd();

glColor3f(0,0,0);

unsigned char c[]="Candy Store";

bmap(180,260,c);

}

void stall1(){

glBegin(GL\_POLYGON);

glColor3f(1,0.5,0);

glVertex2i(350,200);

glVertex2i(120,200);

glVertex2i(120,350);

glVertex2i(350,350);

glEnd();

int x=120,y1=200,y2=350;

glColor3f(1.0, 0.0, 0.0);

int i;

for(i=0;i<11;i++) {

x=x+20;

drawLine(x,y1,y2,2.5);

}

drawLine(130,350,500,2.5);

drawLine(340,350,500,2.5);

glBegin(GL\_TRIANGLES);//roof

glColor3f(0.1, 0.2, 0.3);

glVertex2i(120, 500);

glVertex2i(260, 550);

glVertex2i(350, 500);

glEnd();

glBegin(GL\_POLYGON);

glColor3f(1,1,1);

glVertex2i(400-80,200+50);

glVertex2i(120+20,200+50);

glVertex2i(120+20,350-50);

glVertex2i(400-80,350-50);

glEnd();

glColor3f(0,0,0);

unsigned char c[]="Candy Store";

bmap(150,260,c);

}

void stall2(){

glColor3f(1,0,0);

glBegin(GL\_POLYGON); //left hand

glVertex2i(1810,410);

glVertex2i(1770,300);

glVertex2i(1770,290);

glVertex2i(1810,390);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1840,410);

glVertex2i(1880,300);

glVertex2i(1880,290);

glVertex2i(1840,390);

glEnd();

glBegin(GL\_POLYGON);

glColor3f(1,0.5,0);

glVertex2i(1950,200);

glVertex2i(1720,200);

glVertex2i(1720,350);

glVertex2i(1950,350);

glEnd();

int x=1720,y1=200,y2=350;

glColor3f(1.0, 0.0, 0.0);

int i;

for(i=0;i<11;i++) {

x=x+20;

drawLine(x,y1,y2,2.5);

}

drawLine(1730,350,500,2.5);

drawLine(1940,350,500,2.5);

glBegin(GL\_POLYGON);

glColor3f(1,0.5,0);

glVertex2i(1730,500);

glVertex2i(1940,500);

glVertex2i(1940,550);

glVertex2i(1730,550);

glEnd();

glBegin(GL\_POLYGON);

glColor3f(1,1,1);

glVertex2i(400-60+1580,200+50);

glVertex2i(120+40+1580,200+50);

glVertex2i(120+40+1580,350-50);

glVertex2i(400-60+1580,350-50);

glEnd();

glColor3f(0,0,0);

unsigned char c[]="Soft drinks";

bmap(1750,260,c);

}

void stick(){

glLineWidth(2.0);

glBegin(GL\_LINES);

glVertex2i(220,415);

glVertex2i(220,380);

glEnd();

}

void stick1(){

glLineWidth(2.0);

glBegin(GL\_LINES);

glVertex2i(300,415);

glVertex2i(300,380);

glEnd();

}

void stick2(){

glBegin(GL\_POLYGON);

glVertex2i(1650,420);

glVertex2i(1660,385);

glVertex2i(1670,420);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1730,420);

glVertex2i(1740,385);

glVertex2i(1750,420);

glEnd();

}

void human2(){

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(245,410);

glVertex2i(220,385);

glEnd();

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(275,410);

glVertex2i(300,385);

glEnd();

//right stall hand

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(1690,420);

glVertex2i(1660,390);

glEnd();

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(1710,420);

glVertex2i(1740,390);

glEnd();

glLineWidth(5.0);

glBegin(GL\_LINES);

glVertex2i(275,410);

glVertex2i(300,385);

glEnd();

glColor3f(0.0,2.5,1.5);

glPushMatrix();

glTranslatef(220,420,0);

glScalef(1.0,1.0,0);

glutSolidSphere(9,100,100);

glPopMatrix();

stick();

glColor3f(0.0,2.5,1.5);

glPushMatrix();

glTranslatef(300,420,0);

glScalef(1.0,1.0,0);

glutSolidSphere(9,100,100);

glPopMatrix();

stick1();

glColor3ub(210,105,30);

glPushMatrix();

glTranslatef(1660,420,0);

glScalef(1.0,1.0,0);

glutSolidSphere(9,100,100);

glPopMatrix();

glColor3ub(210,105,30);

glPushMatrix();

glTranslatef(1740,420,0);

glScalef(1.0,1.0,0);

glutSolidSphere(9,100,100);

glPopMatrix();

}

void humans(){

glPushMatrix(); //head

glColor3f(1.0,1.0,1.0);

glScalef(0.5,1,1);

glTranslatef(499.5,317.5,0);

circle(19,19);

glPopMatrix();

glBegin(GL\_POLYGON); //body

glVertex2f(238,220);

glVertex2f(263,220);

glVertex2f(263,290);

glVertex2f(238,290);

glEnd();

glBegin(GL\_POLYGON); //neck

glVertex2f(245.75,290);

glVertex2f(254,290);

glVertex2f(254,310);

glVertex2f(245.75,310);

glEnd();

glBegin(GL\_POLYGON); //hand Left

glVertex2f(238,280);

glVertex2f(220,240);

glVertex2f(220,232);

glVertex2f(238,260);

glEnd();

glBegin(GL\_POLYGON); //hand Right

glVertex2f(263,280);

glVertex2f(278,240);

glVertex2f(278,232);

glVertex2f(263,260);

glEnd();

glBegin(GL\_POLYGON); //leg left

glVertex2f(246.25,166);

glVertex2f(238,166);

glVertex2f(238,220);

glVertex2f(246.25,220);

glEnd();

glBegin(GL\_POLYGON); //leg right

glVertex2f(254,166);

glVertex2f(262.25,166);

glVertex2f(262.25,220);

glVertex2f(254,220);

glEnd();

}

void stalls2(){

glBegin(GL\_POLYGON);

glColor3f(0,0,1);

glVertex2i(1800,200);

glVertex2i(1600,200);

glVertex2i(1600,350);

glVertex2i(1800,350);

glEnd();

int x1=1600,y11=200,y22=350;

glColor3f(0.0, 1.0, 0.0);

int i;

for(i=0;i<10;i++) {

x1=x1+20;

drawLine(x1,y11,y22,2.5);

}

drawLine(1610,350,530,2.5);

drawLine(1790,350,530,2.5);

glBegin(GL\_TRIANGLES);//roof

glColor3f(0.1, 0.2, 0.3);

glVertex2i(1600, 530);

glVertex2i(1700, 580);

glVertex2i(1800, 530);

glEnd();

glBegin(GL\_POLYGON);

glColor3f(1,1,1);

glVertex2i(400-60+1450,200+50);

glVertex2i(120+40+1450,200+50);

glVertex2i(120+40+1450,350-50);

glVertex2i(400-60+1450,350-50);

glEnd();

glColor3f(0,0,0);

unsigned char c[]="Ice Creams";

bmap(1620,260,c);

}

void chairs(){

glColor3f(1,0,0);

glBegin(GL\_LINES);

glVertex2i(600,400);

glVertex2i(600,600);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(400,600);

glVertex2i(800,600);

glVertex2i(600,700);

glVertex2i(400,600);

glEnd();

glColor3f(1,0,0);

glBegin(GL\_LINES);

glVertex2i(1300,400);

glVertex2i(1300,600);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1100,600);

glVertex2i(1510,600);

glVertex2i(1300,700);

glVertex2i(1100,600);

glEnd();

glLineWidth(5);

glBegin(GL\_LINES);

glVertex2i(450,550);

glVertex2i(470,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(470,460);

glVertex2i(530,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(530,460);

glVertex2i(550,400);

glEnd();

glBegin(GL\_LINES);

glVertex2i(470,460);

glVertex2i(450,400);

glEnd();

//right chair

glBegin(GL\_LINES);

glVertex2i(760,550);

glVertex2i(740,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(740,460);

glVertex2i(680,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(680,460);

glVertex2i(660,400);

glEnd();

glBegin(GL\_LINES);

glVertex2i(740,460);

glVertex2i(760,400);

glEnd();

//right umbrella chair

glLineWidth(5);

glBegin(GL\_LINES);

glVertex2i(1150,550);

glVertex2i(1170,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1170,460);

glVertex2i(1240,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1240,460);

glVertex2i(1260,400);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1170,460);

glVertex2i(1150,400);

glEnd();

//right umbrella right chair

glBegin(GL\_LINES);

glVertex2i(1460,550);

glVertex2i(1440,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1440,460);

glVertex2i(1370,460);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1370,460);

glVertex2i(1350,400);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1440,460);

glVertex2i(1460,400);

glEnd();

glColor3ub(162,102,94);

drawCircleBall(470,540,13,0.6);

drawCircleBall(740,539.5,13,0.6);

drawCircleBall(1170,540,13,0.6);

glBegin(GL\_POLYGON);

glVertex2i(460,515);

glVertex2i(485,535);

glVertex2i(510,465);

glVertex2i(475,465);

glEnd();

glLineWidth(1.0);

glBegin(GL\_LINES);

glVertex2i(470,520);

glVertex2i(490,550);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(750,515);

glVertex2i(725,530);

glVertex2i(709,465);

glVertex2i(740,465);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1160,519);

glVertex2i(1190,534);

glVertex2i(1205,465);

glVertex2i(1170,465);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1160,519);

glVertex2i(1190,534);

glVertex2i(1205,465);

glVertex2i(1170,465);

glEnd();

}

void moveboat1(int x)

{

glBegin(GL\_POLYGON); //BOAT

glColor3f(1.0,0,0);

glVertex2i(100,800);

glVertex2i(400, 800);

glVertex2i(480,900);

glVertex2i(50,900);

glVertex2i(100,800);

glEnd();

glBegin(GL\_POLYGON); //BOAT

glColor3f(.6,.19,.83);

glVertex2i(120,900);

glVertex2i(240, 900);

glVertex2i(190,960);

glEnd();

glBegin(GL\_POLYGON); //BOAT

glColor3ub(255,179,0);

glVertex2i(240,900);

glVertex2i(420, 900);

glVertex2i(350,960);

glVertex2i(190,960);

glVertex2i(240,900);

glEnd();

}

void ball() {

glColor3f(0,1,0);

drawCircleBall(450,470,15,2);

}

void moveBall(int x) {

if(ballstatus == 1)

{

if (ballY>=200){

ballY=200;

ballstatus=0;

}

else if(ballX>=600){

ballX = 600;

}

else{

ballY += .5;

ballX += .5;

}

}

if(ballstatus==0){

if(ballX>=500){

ballX = 500;

ballstatus = 2;

}

else{

ballX += .5;

}

}

if(ballstatus==2){

if(ballX>=800 && ballY<=50){

ballX = 800;

ballstatus = 3;

}

else{

ballX +=.5;

ballY -=.5;

}

}

if(ballstatus==3) {

if(ballY>=80){

ballY=80;

ballstatus = 4;

}

else{

ballX -= .5;

ballY +=.3;

}

}

if(ballstatus==4) {

if(ballY<=0){

ballY=0;

ballstatus = 1;

}

else{

ballY -= .1;

ballX -= .5;

}

}

glPushMatrix();

glTranslatef(ballX,ballY,0);

ball();

glPopMatrix();

}

void firstServe() {

if(fserveX>=81){

fserveX = 81;

}

else {

fserveX += .5;

fserveY -= .5;

}

glPushMatrix();

glTranslatef(fserveX,fserveY,0);

man2(420,480);

glPopMatrix();

}

void playvolleyball() {

volleyball();

man2(860,570);

man2(790,400);

man2(580,590);

man2(700,500);

man3(501+500,451,0,0,1);

man3(860+500,570,0,0,1);

man3(790+500,400,0,0,1);

man3(580+500,590,0,0,1);

man3(700+500,500,0,0,1);

moveBall(1);

firstServe();

// middletouchBall();

}

void audience(float x,float y,float r,float g,float b) {

glColor3f(1.0,0.90,0.85);

DrawCircle(x,y+60,25,1000);

//eye

// drawCircleOutline(x+20,y+40,5,1);

//Hair

glColor3f(0.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-25,y+65);

glVertex2f(x-25,y+65);

glVertex2f(x-15,y+95);

// glVertex2f(x+25,y+65);

glVertex2f(x+25,y+95);

glVertex2f(x+25,y+65);

glEnd();

//neck

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x-5.0,y+100.0-80);

glVertex2f(x-5.0,y+120.0-80);

glVertex2f(x+5.0,y+120.0-80);

glVertex2f(x+5.0,y+100.0-80);

glEnd();

//shirt

glColor3f(r,g,b);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-40);

glVertex2f(x-15,y+75-60);

glVertex2f(x-2,y+100-70);

glVertex2f(x+2,y+100-70);

glVertex2f(x+15,y+75-60);

glVertex2f(x+15,y-40);

glEnd();

//pant

glColor3f(0.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-50);

glVertex2f(x-15,y-25);

glVertex2f(x+15,y-25);

glVertex2f(x+15,y-50);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-80);

glVertex2f(x-15,y-50);

glVertex2f(x-2,y-50);

glVertex2f(x-2,y-80);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x+4,y-80);

glVertex2f(x+4,y-50);

glVertex2f(x+15,y-50);

glVertex2f(x+15,y-80);

glEnd();

glColor3f(1.0,0.90,0.85);

glColor3f(1.0,0.90,0.85);

//leg left

drawCircleBall(x-10,y-80,8,1);

//leg right

drawCircleBall(x+10,y-80,8,1);

}

void placeaudiences() {

audience(1100,300,0,1,1);

audience(1200,350,1,.5,0);

audience(1150,380,1,1,0);

audience(1050,400,1,0,1);

audience(1000,320,.75,.75,.75);

audience(900,300,.8,.49,.19);

audience(850,340,.73,.56,.56);

audience(1250,400,.8,.57,.43);

audience(1300,360,.65,.45,.3);

audience(700,320,1,.11,.68);

audience(750,350,.5,.09,.09);

audience(800,310,.85,.85,.95);

audience(1400,280,.30,.18,.30);

audience(1350,330,.55,.41,.13);

}

void boat1()

{

if (boatStatus1 == 1)

{

boatX1 +=.3;

}

if (boatX1>2000)

{

boatX1 = -600;

}

glPushMatrix();

glTranslatef(boatX1, boatY1, 0);

moveboat1(1);

glPopMatrix();

}

void placematchaudience() {

audience(1100,100,0,1,1);

audience(1200,150,.2,.5,0);

audience(1150,220,1,1,0);

audience(1050,120,1,0,1);

audience(1000,200,.5,.75,.75);

audience(900,150,.8,.49,.19);

audience(600,100,.6,.56,.56);

audience(700,150,.8,.57,.43);

audience(800,230,.65,.45,.3);

// audience(900,300);

audience(750,200,1,.11,.68);

audience(500,150,.5,.09,.09);

}

void movekite() {

if(kitestatus==0) {

if(kiteX>=50){

kiteX=50;

kitestatus=1;

}

else {

kiteX+=.05;

}

}

if(kitestatus==1){

if(kiteX<=5){

kiteX=5;

kitestatus=0;

}else{

kiteX-=.05;

}

}

glPushMatrix();

glTranslatef(kiteX,kiteY,0);

glBegin(GL\_POLYGON);

glVertex2i(1200,1150);

glVertex2i(1100,1250);

glVertex2i(1130,1350);

glVertex2i(1210,1310);

glEnd();

glColor3f(0,0,0);

glBegin(GL\_LINES);

glVertex2i(1200,1150);

glVertex2i(1130,1350);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1100,1250);

glVertex2i(1210,1310);

glEnd();

glPopMatrix();

}

void kite(){

glBegin(GL\_LINE\_STRIP);

glVertex2i(1200,1310);

glVertex2i(940,670);

glEnd();

movekite();

}

void kite1(){

if(kitestatus==0) {

if(kiteX>=50){

kiteX=50;

kitestatus=1;

}

else {

kiteX+=.05;

}

}

if(kitestatus==1){

if(kiteX<=5){

kiteX=5;

kitestatus=0;

}else{

kiteX-=.05;

}

}

glBegin(GL\_LINE\_STRIP);

glVertex2i(1200+710,1310);

glVertex2i(940+710,670);

glEnd();

glPushMatrix();

glTranslatef(kiteX,kiteY,0);

glBegin(GL\_POLYGON);

glVertex2i(1200+710,1150);

glVertex2i(1100+710,1250);

glVertex2i(1130+710,1350);

glVertex2i(1210+710,1310);

glEnd();

glColor3f(0,0,0);

glBegin(GL\_LINES);

glVertex2i(1200+710,1150);

glVertex2i(1130+710,1350);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1100+710,1250);

glVertex2i(1210+710,1310);

glEnd();

glPopMatrix();

}

void kite2(){

if(kitestatus==0) {

if(kiteX>=50){

kiteX=50;

kitestatus=1;

}

else {

kiteX+=.05;

}

}

if(kitestatus==1){

if(kiteX<=5){

kiteX=5;

kitestatus=0;

}else{

kiteX-=.05;

}

}

glBegin(GL\_LINE\_STRIP);

glVertex2i(1200-500,1310);

glVertex2i(940-500,670);

glEnd();

glColor3f(1.0,1.0,0);

glPushMatrix();

glTranslatef(kiteX,kiteY,0);

glBegin(GL\_POLYGON);

glVertex2i(1200-500,1150);

glVertex2i(1100-500,1250);

glVertex2i(1130-500,1350);

glVertex2i(1210-500,1310);

glEnd();

glColor3f(0,0,0);

glBegin(GL\_LINES);

glVertex2i(1200-500,1150);

glVertex2i(1130-500,1350);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1100-500,1250);

glVertex2i(1210-500,1310);

glEnd();

glPopMatrix();

}

void lighthouse() {

glBegin(GL\_POLYGON);

glColor3f(1.0,0,0);

glVertex2i(1600,1100);

glColor3f(0.0,0,1.0);

glVertex2i(1620,1300);

glColor3f(0,0,1.0);

glVertex2i(1650,1300);

glColor3f(1.0,0,0);

glVertex2i(1680,1100);

glEnd();

glColor3ub(169,169,169);

glBegin(GL\_POLYGON);

glVertex2i(1580,1050);

glVertex2i(1588,1150);

glVertex2i(1690,1150);

glVertex2i(1700,1050);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1615,1300);

glVertex2i(1615,1300+10);

glVertex2i(1655,1300+10);

glVertex2i(1655,1300);

glEnd();

glColor3f(0,0,0);

glBegin(GL\_LINE\_LOOP);

glVertex2i(1620,1300+10);

glVertex2i(1620,1330+10);

glVertex2i(1650,1330+10);

glVertex2i(1650,1300+10);

glEnd();

glColor3f(1.0,0,0);

glBegin(GL\_POLYGON);

glVertex2i(1620,1340);

glVertex2i(1635,1360);

glVertex2i(1650,1340);

glEnd();

glColor3f(0,0,0);

glBegin(GL\_LINES);

glVertex2i(1630,1310);

glVertex2i(1630,1340);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1640,1310);

glVertex2i(1640,1340);

glEnd();

}

void lighthousenight() {

glBegin(GL\_POLYGON);

glColor3f(1.0,0,0);

glVertex2i(1600,1100);

glColor3f(0.0,0,1.0);

glVertex2i(1620,1300);

glColor3f(0,0,1.0);

glVertex2i(1650,1300);

glColor3f(1.0,0,0);

glVertex2i(1680,1100);

glEnd();

glColor3ub(169,169,169);

glBegin(GL\_POLYGON);

glVertex2i(1580,1050);

glVertex2i(1588,1150);

glVertex2i(1690,1150);

glVertex2i(1700,1050);

glEnd();

glBegin(GL\_POLYGON);

glVertex2i(1615,1300);

glVertex2i(1615,1300+10);

glVertex2i(1655,1300+10);

glVertex2i(1655,1300);

glEnd();

glColor3f(1,1,0);

glBegin(GL\_POLYGON);

glVertex2i(1620,1300+10);

glVertex2i(1620,1330+10);

glVertex2i(1650,1330+10);

glVertex2i(1650,1300+10);

glEnd();

glColor3f(1.0,0,0);

glBegin(GL\_POLYGON);

glVertex2i(1620,1340);

glVertex2i(1635,1360);

glVertex2i(1650,1340);

glEnd();

glColor3f(0,0,0);

glBegin(GL\_LINES);

glVertex2i(1630,1310);

glVertex2i(1630,1340);

glEnd();

glBegin(GL\_LINES);

glVertex2i(1640,1310);

glVertex2i(1640,1340);

glEnd();

}

void moveboatfar1(int x) {

glColor3f(1.0,0,0);

glBegin(GL\_POLYGON);

glVertex2i(100,1150);

glVertex2i(200,1150);

glVertex2i(180,1100+20);

glVertex2i(120,1100+20);

glEnd();

glColor3ub(72,52,46);

glBegin(GL\_POLYGON);

glVertex2i(110+10,1150);

glVertex2i(120+15,1170);

glVertex2i(130+15,1150);

glEnd();

glColor3ub(173,20,87);

glBegin(GL\_POLYGON);

glVertex2i(120+15,1170);

glVertex2i(120+50,1170);

glVertex2i(120+60,1150);

glVertex2i(130+15,1150);

glEnd();

}

void boatfar() {

if (boatfarStatus1 == 1)

{

boatfarX1 +=.3;

}

if (boatfarX1>2000)

{

boatfarX1 = -600;

}

glPushMatrix();

glTranslatef(boatfarX1, boatfarY1, 0);

moveboatfar1(1);

glPopMatrix();

}

void moveboatfar2(int x) {

glColor3f(1.0,0,0);

glBegin(GL\_POLYGON);

glVertex2i(100+200,1150-70);

glVertex2i(200+200,1150-70);

glVertex2i(180+200,1100+20-70);

glVertex2i(120+200,1100+20-70);

glEnd();

glColor3f(0,0,1.0);

glBegin(GL\_POLYGON);

glVertex2i(110+10+200,1150-70);

glVertex2i(120+15+200,1170-70);

glVertex2i(130+15+200,1150-70);

glEnd();

glColor3f(0,1.0,0);

glBegin(GL\_POLYGON);

glVertex2i(120+15+200,1170-70);

glVertex2i(120+50+200,1170-70);

glVertex2i(120+60+200,1150-70);

glVertex2i(130+15+200,1150-70);

glEnd();

}

void drawStar() {

glColor3f(1,1,1);

drawCircleBall(400,1400,2,1);

drawCircleBall(400+200,1400+30,2,1);

drawCircleBall(400+500,1400-20,2,1);

drawCircleBall(400+700,1400+40,2,1);

drawCircleBall(400+350,1400,2,1);

drawCircleBall(400+900,1400+10,2,1);

drawCircleBall(400+1200,1400-30,2,1);

drawCircleBall(400+1100,1400+20,2,1);

drawCircleBall(400+1400,1400-10,2,1);

drawCircleBall(400-150,1400-150,2,1);

drawCircleBall(400+200-150,1400+30-150,2,1);

drawCircleBall(400+500-150,1400-20-150,2,1);

drawCircleBall(400+700-150,1400+40-150,2,1);

drawCircleBall(400+350-150,1400-150,2,1);

drawCircleBall(400+900-150,1400+10-150,2,1);

drawCircleBall(400+1200-150,1400-30-150,2,1);

drawCircleBall(400+1100-150,1400+20-150,2,1);

drawCircleBall(400+1400-150,1400-10-150,2,1);

}

void boatfar2() {

if (boatfarStatus2 == 1)

{

boatfarX2 +=.3;

}

if (boatfarX2>2000)

{

boatfarX2 = -600;

}

glPushMatrix();

glTranslatef(boatfarX2, boatfarY2, 0);

moveboatfar2(1);

glPopMatrix();

}

void drawMoon() {

glColor3f(1,1,1);

DrawCircle(300, 1350, 50, 1000);

}

void stallOwner(float x, float y) {

glColor3f(1.0,0.90,0.85);

DrawCircle(x,y+60,25,1000);

//Hair

glColor3f(0.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-25,y+75);

glVertex2f(x-25,y+65);

glVertex2f(x-15,y+95);

glVertex2f(x+25,y+95);

glVertex2f(x+25,y+75);

glVertex2f(x+25,y+90);

glEnd();

//neck

glColor3f(1.0,0.90,0.85);

glBegin(GL\_POLYGON);

glVertex2f(x-5.0,y+100.0-80);

glVertex2f(x-5.0,y+120.0-80);

glVertex2f(x+5.0,y+120.0-80);

glVertex2f(x+5.0,y+100.0-80);

glEnd();

//mouth

glColor3f(0.0,0.0,0.0);

glBegin(GL\_LINE\_STRIP);

glVertex2f(x-5,y+47);

glVertex2f(x+5,y+47);

glVertex2f(x+5,y+49);

glEnd();

//nose

glBegin(GL\_LINE\_STRIP);

glVertex2f(x,y+50);

glVertex2f(x,y+55);

glVertex2f(x,y+60);

glEnd();

//eye

drawCircleBall(x+15,y+65,3,1);

drawCircleBall(x-13,y+65,3,1);

//shirt

glColor3f(.5,0,.5);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-40);

glVertex2f(x-15,y+75-60);

glVertex2f(x-2,y+100-70);

glVertex2f(x+2,y+100-70);

glVertex2f(x+15,y+75-60);

glVertex2f(x+15,y-40);

glEnd();

//pant

glColor3f(0.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-50);

glVertex2f(x-15,y-25);

glVertex2f(x+15,y-25);

glVertex2f(x+15,y-50);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x-15,y-80);

glVertex2f(x-15,y-50);

glVertex2f(x-2,y-50);

glVertex2f(x-2,y-80);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(x+4,y-80);

glVertex2f(x+4,y-50);

glVertex2f(x+15,y-50);

glVertex2f(x+15,y-80);

glEnd();

glColor3f(1.0,0.90,0.85);

glColor3f(1.0,0.90,0.85);

//leg left

drawCircleBall(x-10,y-80,8,1);

//leg right

drawCircleBall(x+10,y-80,8,1);

}

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

{

if(key=='A' || key=='a'){

sc=1;

}

else if(key=='B' || key=='b') {

sc=3;

}

else if(key=='C' || key=='c') {

sc=2;

curtainstatus=1;

speakerstatus=1;

}

else if(key=='D' || key=='d') {

sc=5;

}

}

void banner() {

// glColor3f(1,.5,0);

unsigned char c[]="WELCOME TO BEACH FESTIVAL";

glColor3f(0,0,0);

glLineWidth(2);

glBegin(GL\_LINE\_STRIP);

glVertex2i(600,200+500);

glVertex2i(1350,200+500);

glEnd();

glBegin(GL\_LINE\_STRIP);

glVertex2i(600,200+420);

glVertex2i(1350,200+420);

glEnd();

glBegin(GL\_LINE\_STRIP);

glVertex2i(600,200+500);

glVertex2i(600,200);

glEnd();

glBegin(GL\_LINE\_STRIP);

glVertex2i(1350,200+500);

glVertex2i(1350,200);

glEnd();

glColor3f(0,0,1);

bmap(740,650,c);

}

void scene1()

{

sky();

moveSun();

ocean();

sand();

movingCloud();

// human();

human2();

stallOwner(260,400);

stallOwner(1700,405);

stick();

stick1();

stick2();

boatfar();

boatfar2();

boat1();

stall();

chairs();

stalls2();

kite();

man2(900,650);

kite1();

kite2();

man2(900+710,650);

man2(900-500,650);

// banner();

lighthouse();

unsigned char nxt[]="press B or b to next Scene";

bmap(1500,100,nxt);

glFlush();

glutPostRedisplay();

glutSwapBuffers();

}

void scene2()

{

sky();

moveSun();

ocean();

sand();

// curtain();

movingCloud();

human();

glLineWidth(1);

stallOwner(260,400);

stick();

stick1();

stall();

// humans();

man3(1120, 500,0,0,1);

boat1();

boatfar();

boatfar2();

lighthouse();

stage();

glColor3ub(255,165,0);

kite1();

kite2();

man2(900+710,650);

man2(900-500,650);

placeaudiences();

unsigned char nxt[]="press D or d to next Scene";

bmap(1500,100,nxt);

glFlush();

glutPostRedisplay();

glutSwapBuffers();

}

void timer(int state) {

}

void scene3()

{

sky();

moveSun();

ocean();

sand();

stallOwner(260,400);

stallOwner(1825,395);

stall1();

stall2();

movingCloud();

human();

stick();

stick1();

boatfar();

boatfar2();

lighthouse();

glColor3ub(255,165,0);

kite1();

kite2();

man2(900+710,650);

man2(900-500,650);

boat1();

// stage();

playvolleyball();

placematchaudience();

unsigned char nxt[]="press C or c to next Scene";

bmap(1500,100,nxt);

// man2(700,500);

glFlush();

glutPostRedisplay();

glutSwapBuffers();

}

void scene4() {

skynight();

// moveSun();

drawMoon();

ocean();

sand();

// movingCloud();

drawStar();

glColor3f(1.0,1.0,1.0);

human();

glLineWidth(1);

stallOwner(260,400);

glColor3f(1.0,0,0);

stick();

stick1();

stall();

// humans();

man3(1120, 500,0,0,1);

boat1();

boatfar();

boatfar2();

lighthousenight();

stage();

// kite1();

// kite2();

// man2(900+710,650);

//

// man2(900-500,650);

placeaudiences();

glFlush();

glutPostRedisplay();

glutSwapBuffers();

}

void intro(void)

{

glClear(GL\_COLOR\_BUFFER\_BIT);

glClearColor(0,1,1,0);

glColor3f(1,.5,0);

unsigned char c[]="MANGALORE INSTITUTE OF TECHNOLOGY AND ENGINEERING";

unsigned char d[]="DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING";

unsigned char u[]="COMPUTER GRAPHICS MINI PROJECT ON";

unsigned char v[]="GRAPHICAL VISUALIZATION OF BEACH FESTIVAL ";

unsigned char by[]="BY:";

unsigned char n1[]="ASHISH K J -4MT20CS037";

unsigned char n2[]="Sinchan D -4MT20CS044";

unsigned char f[]="GUIDED BY:";

unsigned char t1[]="Dr.Shreekumar";

unsigned char nxt[]="press A or a to next Scene";

bmap(1500,100,nxt);

bmap(640,1200,u);

bmap(550,1100,v);

bmap(1000+200,1000,by);

bmap(1000+200,900,n1);

bmap(1000+200,800,n2);

bmap(500,1400,c);

bmap(500,1300,d);

bmap(200,1000,f);

bmap(200,900,t1);

glFlush();

}

void display(void){

glClear(GL\_COLOR\_BUFFER\_BIT);

if(sc==1){

scene1();

glutPostRedisplay();

}else if(sc==2){

scene2();

glutPostRedisplay();

}else if(sc==3){

scene3();

glutPostRedisplay();

}else if(sc==4){

intro();

glutPostRedisplay();

} else if(sc==5){

scene4();

glutPostRedisplay();

}

}

void mouse(int button, int state, int mousex, int mousey)

{

printf("x= %d : y=%d\n",mousex,mousey);

}

void myInit(void)

{

glClearColor(0.0, 0.0, 1.0, 0.0);

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

glPointSize(0.0);

glMatrixMode(GL\_PROJECTION);

glLoadIdentity();

gluOrtho2D(0.0, 2000.0, 0.0, 1500.0);

}

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

{

glutInit(&argc, argv);

glutInitDisplayMode(GLUT\_SINGLE | GLUT\_RGB);

glutInitWindowSize(2000, 1500);

glutInitWindowPosition(0, 0);

glutCreateWindow("Beach Festival");

glutKeyboardFunc(keyboard);

glutDisplayFunc(display);

glutMouseFunc(mouse);

glutTimerFunc(0,timer,100);

myInit();

glutMainLoop();

}