// Final.cpp : Defines the entry point for the console application.

//

//#include "stdafx.h"

#include<stdlib.h>

#include<string.h>

#include<math.h>

#include<GL/glut.h>

#define TEXTID 5

#define maxx 11

#define maxy 6

#define dx 25

#define dy 25

GLint f=1;

GLfloat mov[2]={0.0}, b =0.0,by=0.0,fire1=0.0,tr=0.0,rain\_tr=0.0;

GLfloat x[maxx]={0.0},y[maxy]={0.0},xo=100.0,yo=100.0,a=0.0,carvar=0.0;

GLint flag=0,traflag = 0,i,j,stone\_flag = 0;

GLfloat x1[1]={0.0},x2[1]={100.0},mov\_stone[1]={0.0},ash\_t[3] ={0.0,0.0,0.0};

void houses();

void surroundings();

void rain\_drops();

void android();

void cylinder\_draw();

void dis();

void NormalKey(GLubyte,GLint,GLint);

void \*fonts[]=

{

GLUT\_BITMAP\_9\_BY\_15,

GLUT\_BITMAP\_TIMES\_ROMAN\_10,

GLUT\_BITMAP\_TIMES\_ROMAN\_24,

GLUT\_BITMAP\_HELVETICA\_18,

GLUT\_BITMAP\_HELVETICA\_12

};

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

glBegin(GL\_POLYGON);

for (int ii = 0; ii < num\_segments; ii++) {

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

float x = r \* cosf(theta);//calculate the x component ,to find the cartesian co-ordinate

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

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

}

glEnd();

}

void output(int x, int y, char \*string,void \*font){

int len, i;

glRasterPos2f(x, y);

len = (int) strlen(string);

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

glutBitmapCharacter(font, string[i]);

}

}

void init(){

glMatrixMode(GL\_PROJECTION);

glLoadIdentity();

gluOrtho2D(0.0,1000.0,0.0,1000.0);

glMatrixMode(GL\_MODELVIEW);

glClearColor(0.0,0.0,0.0,0.0);

}

//town

void keys()

{

glColor3f(1.0,0.0,0.0);

output(112,211,"1",fonts[1]);

output(137,211,"2",fonts[1]);

output(162,211,"3",fonts[1]);

output(187,211,"4",fonts[1]);

output(212,211,"5",fonts[1]);

output(237,211,"6",fonts[1]);

output(262,211,"7",fonts[1]);

output(287,211,"8",fonts[1]);

output(312,211,"9",fonts[1]);

output(337,211,"0",fonts[1]);

output(112,186,"Q",fonts[1]);

output(137,186,"W",fonts[1]);

output(162,186,"E",fonts[1]);

output(187,186,"R",fonts[1]);

output(212,186,"T",fonts[1]);

output(237,186,"Y",fonts[1]);

output(262,186,"U",fonts[1]);

output(287,186,"I",fonts[1]);

output(312,186,"O",fonts[1]);

output(337,186,"P",fonts[1]);

output(112,161,"A",fonts[1]);

output(137,161,"S",fonts[1]);

output(162,161,"D",fonts[1]);

output(187,161,"F",fonts[1]);

output(212,161,"G",fonts[1]);

output(237,161,"H",fonts[1]);

output(262,161,"J",fonts[1]);

output(287,161,"K",fonts[1]);

output(312,161,"L",fonts[1]);

output(337,161," ?? ",fonts[1]);

output(112,136," ?? ",fonts[1]);

output(137,136,"Z",fonts[1]);

output(162,136,"X",fonts[1]);

output(187,136,"C",fonts[1]);

output(212,136,"V",fonts[1]);

output(237,136,"B",fonts[1]);

output(262,136,"N",fonts[1]);

output(287,136,"M",fonts[1]);

output(312,136," ?? ",fonts[1]);

output(337,136," ?? ",fonts[1]);

output(112,111," ?? ",fonts[1]);

output(137,111," ?? ",fonts[1]);

output(162,111," ?? ",fonts[1]);

output(224,111,"\_",fonts[1]);

output(287,111," ?? ",fonts[1]);

output(312,111," ?? ",fonts[1]);

output(337,111," ?? ",fonts[1]);

glFlush();

}

void android()

{

glColor3f(0.0,1.0,0.0);

glBegin(GL\_QUADS); // body

glVertex2f(650,650);

glVertex2f(650,800);

glVertex2f(750,800);

glVertex2f(750,650);

glVertex2f(730,650);

glVertex2f(730,600);

glVertex2f(710,600);

glVertex2f(710,650);

glVertex2f(690,650);

glVertex2f(690,600);

glVertex2f(670,600);

glVertex2f(670,650);

glEnd();

DrawCircle(720.0,600.0,10.0,100);

DrawCircle(680.0,600.0,10.0,100);

glBegin(GL\_QUADS); // right hand

glVertex2f(760,800);

glVertex2f(780,800);

glVertex2f(780,700);

glVertex2f(760,700);

glEnd();

DrawCircle(770.0,700.0,10.0,100);

DrawCircle(770.0,800.0,10.0,100);

glBegin(GL\_QUADS); // left hand

glVertex2f(620,800);

glVertex2f(640,800);

glVertex2f(640,700);

glVertex2f(620,700);

glEnd();

DrawCircle(630.0,700.0,10.0,100);

DrawCircle(630.0,800.0,10.0,100);

cylinder\_draw(); // semi-circle head

//antenna

glBegin(GL\_LINES);

glVertex2f(670,840);

glVertex2f(650,870);

glVertex2f(730,840);

glVertex2f(750,870);

glEnd();

glColor3f(1.0,1.0,1.0); //eyes

DrawCircle(675.0,840.0,5.0,100);

DrawCircle(725.0,840.0,5.0,100);

}

void ph\_layout()

{

glColor3f(0.0,0.0,1.0);

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP);

glVertex2f(50,225);

glVertex2f(400,225);

glVertex2f(400,450);

glVertex2f(50,450);

glEnd();

glLineWidth(2.5);

glBegin(GL\_LINE\_LOOP);

glVertex2f(75,250);

glVertex2f(375,250);

glVertex2f(375,425);

glVertex2f(75,425);

glEnd();

glBegin(GL\_LINES);

glColor3f(0.0,1.0,0.0);

glVertex2f(50,225);

glVertex2f(400,225);

glVertex2f(375,250);

glVertex2f(75,250);

glVertex2f(375,250);

glVertex2f(400,225);

glVertex2f(400,450);

glVertex2f(375,425);

glVertex2f(50,450);

glVertex2f(400,450);

glVertex2f(375,425);

glVertex2f(75,425);

glVertex2f(50,225);

glVertex2f(50,450);

glVertex2f(75,425);

glVertex2f(75,250);

glEnd();

glColor3f(0.0,0.0,1.0);

glFlush();

}

/\*void rocket()

{

glBegin(GL\_TRIANGLES);

glColor3f(1.0,0.0,1.0);// head of rocket

glVertex2f(300,400);

glVertex2f(325,475);

glVertex2f(350,400);

glEnd();

glBegin(GL\_QUADS); // body of rocket

glColor3f(0.0,0.0,1.0);

glVertex2f(300,400);

glVertex2f(300,200);

glVertex2f(350,200);

glVertex2f(350,400);

glEnd();

glColor3f(1.0,0.0,0.0);

output(320,350,"M",fonts[3]);

output(320,320,"O",fonts[3]);

output(320,290,"M",fonts[3]);

glBegin(GL\_QUADS); // tail of rocket

glColor3f(1.0,0.0,0.0);

glVertex2f(300,200);

glVertex2f(275,175);

glVertex2f(375,175);

glVertex2f(350,200);

glEnd();

}\*/

void man()

{

glBegin(GL\_LINE\_LOOP); // head

glVertex2f(100,100);

glVertex2f(120,100);

glVertex2f(120,130);

glVertex2f(100,130);

glEnd();

glBegin(GL\_LINE\_LOOP); // upper body

glVertex2f(110,100);

glVertex2f(110,80);

glVertex2f(130,70);

glVertex2f(110,80);

glVertex2f(90,70);

glVertex2f(110,80);

glEnd();

glBegin(GL\_LINE\_LOOP); // lower body

glVertex2f(110,100);

glVertex2f(110,40);

glVertex2f(130,30);

glVertex2f(110,40);

glVertex2f(90,30);

glVertex2f(110,40);

glEnd();

glBegin(GL\_POINTS);

// face (eyes/nose/mouth ...)

glColor3f(1.0,0.0,0.0);

glVertex2f(105,120);

glVertex2f(105,121);

glVertex2f(105,119);

glVertex2f(106,120);

glVertex2f(104,120);

glVertex2f(115,120);

glVertex2f(115,121);

glVertex2f(115,119);

glVertex2f(116,120);

glVertex2f(114,120);

glEnd();

glBegin(GL\_LINES);

glPointSize(5.0);// face (eyes/nose/mouth ...)

glVertex2f(110,115);

glVertex2f(110,110);

glEnd();

glBegin(GL\_LINES);

glPointSize(5.0);// face (eyes/nose/mouth ...)

glVertex2f(105,105);

glVertex2f(115,105);

glEnd();

}

void rocket()

{

glClear(GL\_COLOR\_BUFFER\_BIT|GL\_DEPTH\_BUFFER\_BIT);

glBegin(GL\_TRIANGLES);

glColor3f(1.0,0.0,1.0);// head of rocket

glVertex2f(25,400);

glVertex2f(50,475);

glVertex2f(75,400);

glEnd();

glBegin(GL\_QUADS); // body of rocket

glColor3f(0.0,0.0,1.0);

glVertex2f(25,400);

glVertex2f(25,200);

glVertex2f(75,200);

glVertex2f(75,400);

glEnd();

glColor3f(1.0,0.0,0.0);

output(45,350,"M",fonts[3]);

output(45,320,"O",fonts[3]);

output(45,290,"M",fonts[3]);

glBegin(GL\_QUADS); // tail of rocket

glColor3f(1.0,0.0,0.0);

glVertex2f(25,200);

glVertex2f(0,175);

glVertex2f(100,175);

glVertex2f(75,200);

glEnd();

glLineWidth(5.0);

glBegin(GL\_LINES); // tail of rocket

glColor3f(1.0,1.0,0.0);

glVertex2f(105,0);

glVertex2f(105,1000);

glEnd();

}

void flag\_indian()

{

// glClear(GL\_COLOR\_BUFFER\_BIT|GL\_DEPTH\_BUFFER\_BIT);

glPointSize(2.0);

glBegin(GL\_LINE\_LOOP); // flag stick

glLineWidth(10.0);

glColor3f(1.0,0.0,0.0);

glVertex2f(130,70);

glVertex2f(130,40);

glVertex2f(130,200);

glEnd();

glBegin(GL\_QUADS); // flag (white)

glLineWidth(5.0);

glColor3f(1.0,1.0,1.0);

glVertex2f(130,175);

glVertex2f(200,175);

glVertex2f(200,150);

glVertex2f(130,150);

glEnd();

glBegin(GL\_QUADS); // flag (orange)

glLineWidth(5.0);

glColor3f(1.0,0.5,0.0);

glVertex2f(130,200);

glVertex2f(200,200);

glVertex2f(200,175);

glVertex2f(130,175);

glEnd();

glBegin(GL\_QUADS); // flag (green)

glLineWidth(5.0);

glColor3f(0.0,1.0,0.0);

glVertex2f(130,150);

glVertex2f(200,150);

glVertex2f(200,125);

glVertex2f(130,125);

glEnd();

glColor3f(0.0,0.0,1.0);

DrawCircle(165,165,5,100); // blue chakra

glLineWidth(2.0);

glBegin(GL\_LINE\_LOOP); // flag stick

glLineWidth(5.0);

glColor3f(1.0,1.0,1.0); // white

glVertex2f(130,40);

glVertex2f(130,200);

glVertex2f(200,200);

glVertex2f(200,125);

glVertex2f(130,125);

glEnd();

glFlush();

}

void roads()

{

glColor3f(1.0,0.0,0.0);

glBegin(GL\_LINES);

glVertex2f(450,10); // outer boundary

glVertex2f(980,10);

glVertex2f(450,110);

glVertex2f(980,110);

glVertex2f(500,60); // medians

glVertex2f(520,60);

glVertex2f(600,60);

glVertex2f(620,60);

glVertex2f(700,60);

glVertex2f(720,60);

glVertex2f(800,60);

glVertex2f(820,60);

glVertex2f(900,60);

glVertex2f(920,60);

glEnd();

}

void cars()

{

carvar += 0.1;

if(carvar > 1000.0 )

carvar = 0.0;

glColor3f(1.0,1.0,0.0);

glBegin(GL\_LINE\_LOOP);

glVertex2f(490,30); // outer boundary

glVertex2f(490,50);

glVertex2f(520,50);

glVertex2f(530,80);

glVertex2f(580,80);

glVertex2f(590,50);

glVertex2f(620,50);

glVertex2f(620,30);

glEnd();

glBegin(GL\_LINES); // inner boundary

glVertex2f(520,50);

glVertex2f(590,50);

glVertex2f(530,80);

glVertex2f(530,50);

glVertex2f(560,80);

glVertex2f(560,50);

glEnd();

glColor3f(0.0,1.0,0.0); //green tyres

DrawCircle(530,30,5,100);

DrawCircle(580,30,5,100);

glutPostRedisplay();

}

void oven()

{

// projected from building window

//circle\_draw(500,400,5);

//circle\_draw(500,200,5);

}

void aeroplane()

{

glColor3f(0.0,1.0,1.0);

glBegin(GL\_LINE\_LOOP); //GL\_LINE\_LOOP

glVertex2f(800,760);

glVertex2f(820,800);

glVertex2f(900,800);

glVertex2f(910,820);

glVertex2f(920,800);

glVertex2f(980,800);

glVertex2f(920,780);

glEnd();

}

void windows(int p,int q,int r,int s)

{

glBegin(GL\_LINE\_LOOP); // windows

glVertex2f(p,r);

glVertex2f(q,r);

glVertex2f(q,s);

glVertex2f(p,s);

glEnd();

}

void buildings()

{

glColor3f(1.0,1.0,1.0);

glBegin(GL\_LINE\_LOOP);

glVertex2f(840,260);

glVertex2f(860,260);

glVertex2f(860,640);

glVertex2f(840,640);

glEnd();

glBegin(GL\_LINE\_LOOP);

glVertex2f(800.0,250.0);

glVertex2f(800.0,650.0);

glVertex2f(900.0,650.0);

glVertex2f(900.0,250.0);

glEnd();

//rear

glBegin(GL\_LINE\_LOOP);

glVertex2f(800.0,650.0);

glVertex2f(830.0,680.0);

glVertex2f(930.0,680.0);

glVertex2f(900.0,650.0);

glVertex2f(900.0,250.0);

glVertex2f(930.0,280.0);

glVertex2f(900.0,250.0);

glVertex2f(900.0,650.0);

glVertex2f(800.0,650.0);

glEnd();

// to create windows of building

windows(810,830,600,630);

windows(870,890,600,630);

windows(810,830,550,580);

windows(870,890,550,580);

windows(810,830,500,530);

windows(870,890,500,530);

windows(810,830,450,480);

windows(870,890,450,480);

windows(810,830,400,430);

windows(870,890,400,430);

windows(810,830,350,380);

windows(870,890,350,380);

windows(810,830,300,330);

windows(870,890,300,330);

glBegin(GL\_LINES);

glVertex2f(930.0,680.0);

glVertex2f(930.0,280.0);

glEnd();

}

void town()

{

glClear(GL\_COLOR\_BUFFER\_BIT);

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

man();

rocket();

flag\_indian();

buildings();

roads();

aeroplane();

glPushMatrix();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(carvar,1.0,1.0);

cars();

glutPostRedisplay();

glPopMatrix();

}

//smartphone

void draw\_pixel(GLint cx,GLint cy)

{

glColor3f(0.0,1.0,0.0);

glBegin(GL\_LINES); //GL\_POINTS

glVertex2f(cx,cy);

glVertex2f(695,820);

glEnd();

}

void plot\_pixel(GLint h,GLint k,GLint x,GLint y)

{

draw\_pixel(x+h,y+k);

draw\_pixel(-x+h,y+k);

draw\_pixel(y+h,x+k);

draw\_pixel(-y+h,x+k);

}

void circle\_draw(GLint h,GLint k,GLint r)

{

GLint d = 1-r,x=0,y=r;

while(y>x)

{

plot\_pixel(h,k,x,y);

if(d<0)

d+=2\*x+3;

else

{

d+=2\*(x-y)+5;

--y;

}

++x;

}

plot\_pixel(h,k,x,y);

}

void cylinder\_draw()

{

GLint xc=690,yc=800,r=50;

GLint i,n=50;

for(i=0;i<n;i+=3)

circle\_draw(xc+10,yc+20,r);

}

void newshape(GLfloat h,GLfloat k,GLfloat r,GLfloat a,GLfloat b,GLfloat c)

{

float i,j;

glColor3f(a,b,c);

glPointSize(1.0);

for(j=2\*r;j>=r/2;j-=0.5)

{

glFlush();

glBegin(GL\_LINE\_LOOP);

for(i=0;i<=2\*3.14;i=i+0.01)

{

if((r/2<abs(j\*cos(i)))||(r/2<abs(j\*sin(i))))

continue;

glVertex2f(h+j\*cos(i),k+j\*sin(i));

}

glEnd();

}

}

void message()

{

glColor3f(0.0,0.0,0.0);

output(120.0,360.0,"HEY!",fonts[1]);

glFlush();for(int j=0;j<10000000;j++);

output(800.0,360.0,"HEY!",fonts[1]);

glFlush();for(j=0;j<10000000;j++);

}

void mesh()

{

for(i=0;i<maxx;i++)

x[i]=(xo)+i\*dx;

for(j=0;j<maxy;j++)

y[j]=(yo)+j\*dy;

for(i=0;i<maxx-1;i++)

for(j=0;j<maxy-1;j++)

{

glBegin(GL\_LINE\_LOOP);

glVertex2f(x[i],y[j]); // cw direction

glVertex2f(x[i],y[j+1]);

glVertex2f(x[i+1],y[j+1]);

glVertex2f(x[i+1],y[j]);

glEnd();

glFlush();

}

glColor3f(1.0,1.0,1.0);

glBegin(GL\_LINES);

glVertex2f(200,100);

glVertex2f(200,125);

glVertex2f(225,100);

glVertex2f(225,125);

glVertex2f(250,100);

glVertex2f(250,125);

glColor3f(1.0,0.0,0.0);

glVertex2f(200,100);

glVertex2f(251,100);

glVertex2f(200,125);

glVertex2f(251,125);

glEnd();

}

void smartphone()

{

glClear(GL\_COLOR\_BUFFER\_BIT|GL\_DEPTH\_BUFFER\_BIT);

glColor3f(1.5,0.7,0.0);

glBegin(GL\_POLYGON);

glVertex2f(110.0,390.0);

glVertex2f(110.0,350.0);

glVertex2f(160.0,350.0);

glVertex2f(160.0,390.0);

glEnd();

mesh();

keys();

ph\_layout();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(500.0,0.0,0.0);

mesh();

keys();

ph\_layout();

newshape(350,337,40,1.0,0.0,1.0);

glColor3f(1.5,0.7,0.0);

glBegin(GL\_POLYGON);

glVertex2f(280.0,390.0);

glVertex2f(280.0,350.0);

glVertex2f(330.0,350.0);

glVertex2f(330.0,390.0);

glEnd();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

android();

newshape(350,337,40,1.0,0.0,1.0);

message();

}

void rain\_drops()

{

rain\_tr +=0.1;

if(rain\_tr >400)

rain\_tr =0.0;

glBegin(GL\_LINES);

glVertex2f(710,640);

glVertex2f(660,590);

glVertex2f(600,700);

glVertex2f(550,650);

glVertex2f(580,600);

glVertex2f(530,550);

glVertex2f(720,500);

glVertex2f(670,450);

glVertex2f(680,530);

glVertex2f(630,480);

glVertex2f(650,630);

glVertex2f(600,580);

glEnd();

glutPostRedisplay();

}

void houses()

{

glColor3f(1.0,0.0,0.0);

glBegin(GL\_LINE\_LOOP); //house1

glVertex2f(700,200);

glVertex2f(700,300);

glVertex2f(800,300);

glVertex2f(800,200);

glEnd();

glBegin(GL\_LINE\_LOOP);

glVertex2f(700,300);

glVertex2f(750,350);

glVertex2f(900,350);

glVertex2f(950,300);

glEnd();

glBegin(GL\_LINE\_LOOP);

glVertex2f(800,300);

glVertex2f(750,350);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(800,300);

glVertex2f(950,300);

glVertex2f(950,200);

glVertex2f(800,200);

glEnd();

glBegin(GL\_LINE\_LOOP); //house2

glVertex2f(510,150);

glVertex2f(510,200);

glVertex2f(535,250);

glVertex2f(560,200);

glVertex2f(560,150);

glEnd();

glBegin(GL\_LINES);

glVertex2f(560,200);

glVertex2f(510,200);

glEnd();

glBegin(GL\_LINE\_LOOP); //house3

glVertex2f(40,50);

glVertex2f(40,100);

glVertex2f(65,150);

glVertex2f(90,100);

glVertex2f(90,50);

glEnd();

glBegin(GL\_LINES);

glVertex2f(90,100);

glVertex2f(40,100);

glEnd();

glBegin(GL\_LINE\_LOOP); //house4

glVertex2f(340,90);

glVertex2f(340,140);

glVertex2f(365,190);

glVertex2f(390,140);

glVertex2f(390,90);

glEnd();

glBegin(GL\_LINES);

glVertex2f(390,140);

glVertex2f(340,140);

glEnd();

glBegin(GL\_LINE\_LOOP); //house5

glVertex2f(610,50);

glVertex2f(610,100);

glVertex2f(635,150);

glVertex2f(660,100);

glVertex2f(660,50);

glEnd();

glBegin(GL\_LINES);

glVertex2f(660,100);

glVertex2f(610,100);

glEnd();

}

void surroundings()

{

glClearColor(0.0,0.0,0.2,0.0);

glColor3f(1.0,1.0,1.0);

//the moon

DrawCircle(120.0,900.0,30.0,100);

glColor3f(0.49,0.37,0.39); // clouds

DrawCircle(770.0,790.0,100.0,100);

DrawCircle(760.0,880.0,40.0,100);

DrawCircle(750.0,880.0,40.0,100);

DrawCircle(730.0,860.0,40.0,100);

DrawCircle(720.0,830.0,40.0,100);

DrawCircle(780.0,800.0,20.0,100);

DrawCircle(780.0,780.0,20.0,100);

DrawCircle(780.0,760.0,20.0,100);

DrawCircle(800.0,780.0,100.0,100);

DrawCircle(820.0,740.0,70.0,100);

glColor3f(0.49,0.47,0.40);

DrawCircle(670.0,790.0,100.0,100);

DrawCircle(660.0,880.0,40.0,100);

DrawCircle(650.0,880.0,40.0,100);

DrawCircle(630.0,860.0,40.0,100);

DrawCircle(620.0,830.0,40.0,100);

DrawCircle(580.0,800.0,20.0,100);

DrawCircle(580.0,780.0,20.0,100);

DrawCircle(580.0,760.0,20.0,100);

DrawCircle(600.0,780.0,100.0,100);

DrawCircle(620.0,740.0,70.0,100);

glColor3f(0.0,0.0,1.0); // rain

glLineWidth(2.0);

glColor3f(0.20,0.0,0.0);

glBegin(GL\_POLYGON); // parts of tree

glVertex2f(450.0,440.0);

glVertex2f(500.0,440.0);

glVertex2f(500.0,240.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(470.0,120.0);

glVertex2f(500.0,120.0);

glVertex2f(500.0,470.0);

glEnd();

glColor3f(0.0,0.6,0.0);

DrawCircle(470.0,490.0,100.0,100);

DrawCircle(460.0,580.0,40.0,100);

DrawCircle(450.0,580.0,40.0,100);

DrawCircle(430.0,560.0,40.0,100);

DrawCircle(420.0,530.0,40.0,100);

DrawCircle(380.0,500.0,20.0,100);

DrawCircle(380.0,480.0,20.0,100);

DrawCircle(380.0,460.0,20.0,100);

DrawCircle(400.0,480.0,100.0,100);

DrawCircle(420.0,440.0,70.0,100);

//bushes

DrawCircle(540.0,100.0,10.0,10);

DrawCircle(535.0,90.0,10.0,100);

DrawCircle(545.0,90.0,10.0,100);

DrawCircle(160.0,130.0,10.0,10);

DrawCircle(155.0,120.0,10.0,100);

DrawCircle(165.0,120.0,10.0,100);

DrawCircle(210.0,50.0,10.0,10);

DrawCircle(205.0,40.0,10.0,100);

DrawCircle(215.0,40.0,10.0,100);

DrawCircle(260.0,120.0,10.0,10);

DrawCircle(255.0,110.0,10.0,100);

DrawCircle(265.0,110.0,10.0,100);

DrawCircle(460.0,80.0,10.0,10);

DrawCircle(455.0,70.0,10.0,100);

DrawCircle(465.0,70.0,10.0,100);

DrawCircle(110.0,60.0,10.0,10);

DrawCircle(105.0,50.0,10.0,100);

DrawCircle(115.0,50.0,10.0,100);

glColor3f(0.25,0.16,0.14); // brown soil

// farming

glBegin(GL\_QUADS);

glVertex2f(600,20);

glVertex2f(980,20);

glVertex2f(980,180);

glVertex2f(600,180);

glEnd();

glColor3f(0.0,1.0,0.0);

glBegin(GL\_LINES);

glVertex2f(680,30);

glVertex2f(680,50);

glVertex2f(680,50);

glVertex2f(670,60);

glVertex2f(680,50);

glVertex2f(690,60);

glVertex2f(780,30);

glVertex2f(780,50);

glVertex2f(780,50);

glVertex2f(770,60);

glVertex2f(780,50);

glVertex2f(790,60);

glVertex2f(880,30);

glVertex2f(880,50);

glVertex2f(880,50);

glVertex2f(870,60);

glVertex2f(880,50);

glVertex2f(890,60);

glVertex2f(730,70);

glVertex2f(730,90);

glVertex2f(730,90);

glVertex2f(720,100);

glVertex2f(730,90);

glVertex2f(740,100);

glVertex2f(830,70);

glVertex2f(830,90);

glVertex2f(830,90);

glVertex2f(820,100);

glVertex2f(830,90);

glVertex2f(840,100);

glVertex2f(930,70);

glVertex2f(930,90);

glVertex2f(930,90);

glVertex2f(920,100);

glVertex2f(930,90);

glVertex2f(940,100);

glVertex2f(680,110);

glVertex2f(680,130);

glVertex2f(680,130);

glVertex2f(675,135);

glVertex2f(680,130);

glVertex2f(685,135);

glVertex2f(780,110);

glVertex2f(780,130);

glVertex2f(780,130);

glVertex2f(775,135);

glVertex2f(780,130);

glVertex2f(785,135);

glVertex2f(880,110);

glVertex2f(880,130);

glVertex2f(880,130);

glVertex2f(875,135);

glVertex2f(880,130);

glVertex2f(885,135);

glVertex2f(730,150);

glVertex2f(730,170);

glVertex2f(730,170);

glVertex2f(725,175);

glVertex2f(730,170);

glVertex2f(735,175);

glVertex2f(830,150);

glVertex2f(830,170);

glVertex2f(830,170);

glVertex2f(825,175);

glVertex2f(830,170);

glVertex2f(835,175);

glVertex2f(930,150);

glVertex2f(930,170);

glVertex2f(930,170);

glVertex2f(925,175);

glVertex2f(930,170);

glVertex2f(935,175);

glEnd();

}

void mordern\_scenary()

{

glClear(GL\_COLOR\_BUFFER\_BIT);

glColor3f(1.0,0.0,0.0);

glPointSize(2.0);

glColor3f(0.4,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(0.0,0.0);

glVertex2f(0.0,200.0);

glVertex2f(1000.0,200.0);

glVertex2f(1000.0,0.0);

glEnd();

glColor3f(1.0,0.0,0.0);

glBegin(GL\_TRIANGLES); // Mountains

glColor3f(0.35,0.16,0.14);

glVertex2f(0,200);

glVertex2f(100,400);

glVertex2f(200,200);

glEnd();

glBegin(GL\_TRIANGLE\_FAN); // Snow on Mountain

glColor3f(0.90,0.91,0.98);

glVertex2f(100,400);

glVertex2f(75,350);

glVertex2f(87.5,360);

glVertex2f(100,350);

glVertex2f(112.5,360);

glVertex2f(125,350);

glEnd();

glBegin(GL\_TRIANGLES); // Mountains

glColor3f(0.45,0.16,0.14);

glVertex2f(150,200);

glVertex2f(250,350);

glVertex2f(350,200);

glEnd();

glBegin(GL\_TRIANGLES); // Mountains

glColor3f(0.55,0.16,0.14);

glVertex2f(300,200);

glVertex2f(400,300);

glVertex2f(500,200);

glEnd();

glBegin(GL\_QUADS); // River

glColor3f(0.137255,0.137255,0.556863);

glVertex2f(100,100);

glVertex2f(120,120);

glVertex2f(170,95);

glVertex2f(150,75);

glEnd();

glBegin(GL\_QUADS); // River

glColor3f(0.137255,0.137255,0.556863);

glVertex2f(100,100);

glVertex2f(120,120);

glVertex2f(40,200);

glVertex2f(80,200);

glEnd();

glBegin(GL\_QUADS); // River

glColor3f(0.137255,0.137255,0.556863);

glVertex2f(170,95);

glVertex2f(150,75);

glVertex2f(270,95);

glVertex2f(250,75);

glEnd();

glBegin(GL\_QUADS); // River

glColor3f(0.137255,0.137255,0.556863);

glVertex2f(270,95);

glVertex2f(250,75);

glVertex2f(470,0);

glVertex2f(550,0);

glEnd();

surroundings(); //moon\_stars\_grass

houses();

glColor3f(0.0,0.0,1.0);

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(-rain\_tr,-rain\_tr,0.0);

rain\_drops();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

}

void topic()

{

glColor3f(1.0,0.0,0.0);

//T

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(200.0,500.0);

glVertex2f(180.0,420.0);

glVertex2f(220.0,420.0);

glEnd();

glBegin(GL\_TRIANGLE\_FAN);

glVertex2f(140.0,490.0);

glVertex2f(230.0,520.0);

glVertex2f(230.0,490.0);

glEnd();

//H

glBegin(GL\_POLYGON);

glVertex2f(235.0,500.0);

glVertex2f(235.0,400.0);

glVertex2f(245.0,500.0);

glVertex2f(245.0,400.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(265.0,500.0);

glVertex2f(265.0,400.0);

glVertex2f(275.0,500.0);

glVertex2f(275.0,400.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(245.0,440.0);

glVertex2f(245.0,450.0);

glVertex2f(265.0,440.0);

glVertex2f(265.0,450.0);

glEnd();

//E

glBegin(GL\_POLYGON);

glVertex2f(285.0,495.0);

glVertex2f(285.0,445.0);

glVertex2f(295.0,445.0);

glVertex2f(295.0,495.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(295.0,496.0);

glVertex2f(295.0,510.0);

glVertex2f(325.0,490.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(295.0,465.0);

glVertex2f(295.0,475.0);

glVertex2f(325.0,470.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(295.0,455.0);

glVertex2f(295.0,445.0);

glVertex2f(325.0,440.0);

glEnd();

//A

glBegin(GL\_TRIANGLES);

glVertex2f(350.0,435.0);

glVertex2f(370.0,435.0);

glVertex2f(390.0,520.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(410.0,435.0);

glVertex2f(430.0,435.0);

glVertex2f(390.0,520.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(360.0,470.0);

glVertex2f(360.0,480.0);

glVertex2f(420.0,470.0);

glVertex2f(420.0,480.0);

glEnd();

//G

glBegin(GL\_TRIANGLES);

glVertex2f(440.0,455.0);

glVertex2f(460.0,455.0);

glVertex2f(480.0,510.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(440.0,455.0);

glVertex2f(440.0,445.0);

glVertex2f(500.0,442.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(480.0,465.0);

glVertex2f(490.0,465.0);

glVertex2f(500.0,410.0);

glEnd();

//E

glBegin(GL\_POLYGON);

glVertex2f(500.0,495.0);

glVertex2f(500.0,445.0);

glVertex2f(510.0,445.0);

glVertex2f(510.0,495.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(510.0,496.0);

glVertex2f(510.0,510.0);

glVertex2f(545.0,490.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(510.0,465.0);

glVertex2f(510.0,475.0);

glVertex2f(545.0,470.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(510.0,455.0);

glVertex2f(510.0,445.0);

glVertex2f(545.0,440.0);

glEnd();

//s

glBegin(GL\_TRIANGLES);

glVertex2f(550.0,495.0);

glVertex2f(550.0,510.0);

glVertex2f(595.0,520.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(550.0,500.0);

glVertex2f(595.0,480.0);

glVertex2f(595.0,470.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(595.0,470.0);

glVertex2f(550.0,410.0);

glVertex2f(550.0,400.0);

glEnd();

}

// Stone

void stone\_fire()

{

glColor3f(1.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(520.0,440.0);

glVertex2f(530.0,440.0);

glVertex2f(440.0,380.0);

glVertex2f(420.0,380.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(530.0,380.0);

glVertex2f(540.0,440.0);

glVertex2f(550.0,440.0);

glVertex2f(560.0,380.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(540.0,440.0);

glVertex2f(550.0,440.0);

glVertex2f(650.0,380.0);

glVertex2f(640.0,380.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(480.0,380.0);

glVertex2f(531.0,440.0);

glVertex2f(534.0,440.0);

glVertex2f(500.0,380.0);

glEnd();

glColor3f(1.0,0.0,0.0);

}

void sparks()

{

glColor3f(1.0,1.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(500.0,400.0);

glVertex2f(550.0,420.0);

glVertex2f(560.0,410.0);

glVertex2f(600.0,430.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(450.0,500.0);

glVertex2f(460.0,550.0);

glVertex2f(450.0,550.0);

glVertex2f(450.0,530.0);

glVertex2f(470.0,600.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(500.0,480.0);

glVertex2f(520.0,500.0);

glVertex2f(550.0,500.0);

glEnd();

//

}

void stone1()

{

x1[0] -=.3;

if(x1[0] <-70.0)

{

x1[0] = 10.0;

}

glColor3f(0.494111,0.49,0.49);

DrawCircle(500.0,350.0,50.0,10);

DrawCircle(520.0,360.0,50.0,7);

DrawCircle(530.0,350.0,50.0,10);

DrawCircle(530.0,330.0,50.0,7);

glutPostRedisplay();

}

void stone2()

{

x2[0] +=.3;

if(x2[0] >90.0)

{

x2[0] = 10.0;

}

glColor3f(0.494111,0.49843,0.4960);

DrawCircle(300.0,300.0,50.0,10);

DrawCircle(320.0,330.0,50.0,7);

DrawCircle(330.0,320.0,50.0,10);

DrawCircle(330.0,300.0,50.0,7);

glutPostRedisplay();

}

void ash1(){

ash\_t[0] +=0.02;

if(ash\_t[0]>100.0)

ash\_t[0] = 0.0;

glPointSize(5.0);

glColor3f(1.0,1.0,0.0);

glBegin(GL\_POINTS);

glVertex2f(550.0,590.0);

glEnd();

glutPostRedisplay();

}

void ash2()

{

ash\_t[1] +=0.02;

if(ash\_t[1]>30.0)

ash\_t[1] = 0.0;

glPointSize(5.0);

glColor3f(1.0,1.0,0.0);

glBegin(GL\_POINTS);

glVertex2f(570.0,600.0);

glEnd();

glutPostRedisplay();

}

void ash3()

{

ash\_t[2] +=0.02;

if(ash\_t[2]>150.0)

ash\_t[2] = 0.0;

glPointSize(5.0);

glColor3f(1.0,1.0,0.0);

glBegin(GL\_POINTS);

glVertex2f(490.0,580.0);

glEnd();

glutPostRedisplay();

}

void flames\_final()

{ mov\_stone[0] +=0.3;

if(mov\_stone[0]>5)

mov\_stone[0] =0.01;

glColor3f(1.0,1.0,0.0);

DrawCircle(540.0,490.0,50.0,100);

glBegin(GL\_TRIANGLES);

glVertex2f(540.0,670.0);

glVertex2f(500.0,490.0);

glVertex2f(570.0,490.0);

glVertex2f(570.0,660.0);

glVertex2f(590.0,490.0);

glVertex2f(520.0,490.0);

glVertex2f(480.0,600.0);

glVertex2f(500.0,490.0);

glVertex2f(520.0,490.0);

glEnd();

glColor3f(1.0,0.0,0.0);

glutPostRedisplay();

}

void ground\_fire()

{

glColor3f(0.1,0.0,0.0);

DrawCircle(900.0,190.0,500.0,10);

glColor3f(0.2,0.0,0.0);

DrawCircle(900.0,90.0,500.0,10);

DrawCircle(200.0,500.0,300.0,10);

glColor3f(0.2,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(0.0,0.0);

glVertex2f(1000.0,0.0);

glVertex2f(1000.0,500.0);

glVertex2f(0.0,500.0);

glEnd();

glColor3f(0.1,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(0.0,10.0);

glVertex2f(0.0,0.0);

glVertex2f(1000.0,100.0);

glVertex2f(1000.0,0.0);

glEnd();

DrawCircle(400.0,-300.0,400.0,20);

}

void Fire\_used()

{

glPushMatrix();

glClear(GL\_COLOR\_BUFFER\_BIT|GL\_DEPTH\_BUFFER\_BIT);

glColor3f(1.0,0.0,0.0);

glClearColor(0.0,0.0,0.2,0.0);

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

ground\_fire();

if(stone\_flag !=-1)

{

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

stone\_fire();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(x1[0],x1[0],0.0);

stone1();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(x2[0],x2[0],0.0);

stone2();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

if(x2[0] >40 && x1[0]<-20)

{

sparks();

stone\_flag ++;

}

if(stone\_flag >600)

{

stone\_flag = -1;

}

}

if(stone\_flag == -1)

{

glColor3f(0.3,0.0,0.0);

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

stone\_fire();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

stone1();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

stone2();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(0.0,mov\_stone[0],0.0);

flames\_final();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(0.0,ash\_t[0],0.0);

ash1();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(0.0,ash\_t[2],0.0);

ash3();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(ash\_t[1],ash\_t[1],0.0);

ash2();

// flames\_final();

}

glPopMatrix();

}

//Hunting

void bird()

{

if( b<282.0)

b = b+0.25;

else

{

glPushMatrix();

glColor3f(1.0,0.0,0.0);

DrawCircle(770.0,310.0,12.0,100.0);

DrawCircle(780.0,290.0,10.0,100.0);

glPopMatrix();

glTranslatef(1.0,-250.0,0.0);

}

glColor3f(0.0,1.0,1.0);

glPointSize(5.0);

glLineWidth(1.5);

glBegin(GL\_LINES);

glVertex2f(800.0,511.0);

glVertex2f(870.0,500.0);

glVertex2f(870.0,500.0);

glVertex2f(800.0,510.0);

glEnd();

glBegin(GL\_TRIANGLES);

glVertex2f(800.0,511.0);

glVertex2f(840.0,540.0);

glVertex2f(750.0,511.0);

glVertex2f(800.0,511.0);

glVertex2f(820.0,540.0);

glVertex2f(750.0,511.0);

glVertex2f(800.0,511.0);

glVertex2f(800.0,540.0);

glVertex2f(750.0,511.0);

glVertex2f(800.0,511.0);

glVertex2f(760.0,540.0);

glVertex2f(750.0,511.0);

glVertex2f(755.0,500.0);

glVertex2f(755.0,520.0);

glVertex2f(750.0,510.0);

glEnd();

glColor3f(0.0,0.0,0.8);

glBegin(GL\_POINTS);

glVertex2f(808.0,518.0);

glVertex2f(810.0,519.0);

glVertex2f(812.0,520.0);

glVertex2f(814.0,521.0);

glVertex2f(816.0,522.0);

glVertex2f(818.0,523.0);

glVertex2f(820.0,524.0);

glVertex2f(822.0,526.0);

//

glVertex2f(808.0,498.0);

glVertex2f(810.0,497.0);

glVertex2f(812.0,496.0);

glVertex2f(814.0,495.0);

glVertex2f(816.0,494.0);

glVertex2f(818.0,493.0);

glVertex2f(820.0,492.0);

glVertex2f(822.0,490.0);

glEnd();

glutPostRedisplay();

}

void spear()

{

/\*theta[0]-=.2;\*/

if( mov[1] <281)

mov[1] +=0.25;

else

{

glTranslatef(10.0,-250.0,0.0);

}

glColor3f(1.0,0.0,0.0);

glLineWidth(2.0);

glBegin(GL\_LINES);

//spear

glColor3f(1.0,0.0,0.0);

glVertex2f(100.0,140.0);

glVertex2f(200.0,240.0);

glVertex2f(200.0,240.0);

glVertex2f(205.0,250.0);

glVertex2f(205.0,250.0);

glVertex2f(215.0,255.0);

glVertex2f(215.0,255.0);

glVertex2f(209.0,245.0);

glVertex2f(209.0,245.0);

glVertex2f(200.0,240.0);

glEnd();

glutPostRedisplay();

}

void trees\_sun\_moon()

{

glColor3f(1.0,1.0,0.0);

//the moon

DrawCircle(120.0,900.0,30.0,100);

glColor3f(0.20,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(250.0,440.0);

glVertex2f(300.0,440.0);

glVertex2f(300.0,240.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(270.0,120.0);

glVertex2f(300.0,120.0);

glVertex2f(300.0,470.0);

glEnd();

glColor3f(0.0,0.6,0.0);

DrawCircle(270.0,490.0,100.0,100);

DrawCircle(260.0,580.0,40.0,100);

DrawCircle(250.0,580.0,40.0,100);

DrawCircle(230.0,560.0,40.0,100);

DrawCircle(220.0,530.0,40.0,100);

DrawCircle(180.0,500.0,20.0,100);

DrawCircle(180.0,480.0,20.0,100);

DrawCircle(180.0,460.0,20.0,100);

DrawCircle(200.0,480.0,100.0,100);

DrawCircle(220.0,440.0,70.0,100);

glColor3f(1.0,0.0,0.0);

}

void stick\_figure()

{

/\*theta[0]-=.2;\*/

if( mov[0] <20)

mov[0] +=0.01;

glLineWidth(5.0);

glColor3f(1.0,0.0,0.0);

DrawCircle(200.0,205.0,15.0,100);

glBegin(GL\_LINES);

glVertex2f(200.0,190.0);

glVertex2f(200.0,150.0);

glVertex2f(200.0,150.0);

glVertex2f(180.0,125.0);

glVertex2f(180.0,125.0);

glVertex2f(160.0,140.0);

glVertex2f(200.0,150.0);

glVertex2f(210.0,120.0);

glVertex2f(210.0,120.0);

glVertex2f(190.0,90.0);

//hands

//left

glVertex2f(200.0,170.0);

glVertex2f(170.0,180.0);

glVertex2f(170.0,180.0);

glVertex2f(160.0,200.0);

//right

glVertex2f(200.0,170.0);

glVertex2f(230.0,170.0);

glEnd();

}

void cliff()

{

glBegin(GL\_POLYGON);

glColor3f(0.6,0.25,0.08);

glVertex2f(0.0,0.0);

glVertex2f(0.0,300.0);

glVertex2f(500.0,300.0);

glVertex2f(500.0,0.0);

glEnd();

DrawCircle(120.0,210.0,100.0,100);

DrawCircle(140.0,220.0,100.0,100);

DrawCircle(160.0,230.0,100.0,100);

DrawCircle(220.0,220.0,100.0,100);

DrawCircle(400.0,200.0,100.0,100);

DrawCircle(380.0,210.0,100.0,100);

DrawCircle(450.0,220.0,100.0,100);

}

void Hunting()

{

glPushMatrix();

glClear(GL\_COLOR\_BUFFER\_BIT|GL\_DEPTH\_BUFFER\_BIT);

glClear(GL\_COLOR\_BUFFER\_BIT);

glClearColor(0.0,0.0,0.8,0.0);

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

cliff();

trees\_sun\_moon();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(mov[1],mov[1],0.0);

spear();

glPushMatrix();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(mov[0],0.0,0.0);

stick\_figure();

glPopMatrix();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(-b,0.0,0.0);

bird();

glPopMatrix();

}

//cooking

void flames()

{

fire1 +=0.1;

if(fire1>3)

fire1 =-1.0;

glColor3f(1.0,1.0,0.0);

DrawCircle(440.0,190.0,50.0,100);

glBegin(GL\_TRIANGLES);

glVertex2f(440.0,370.0);

glVertex2f(400.0,190.0);

glVertex2f(470.0,190.0);

glVertex2f(470.0,360.0);

glVertex2f(490.0,190.0);

glVertex2f(420.0,190.0);

glVertex2f(380.0,300.0);

glVertex2f(400.0,190.0);

glVertex2f(420.0,190.0);

glEnd();

glColor3f(1.0,0.0,0.0);

glutPostRedisplay();

}

void cave()

{

DrawCircle(1000.0,300.0,300.0,10);

glColor3f(0.0,0.0,0.0);

DrawCircle(950.0,350.0,200.0,10);

glColor3f(0.2,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(760.0,480.0);

glVertex2f(1000.0,700.0);

glVertex2f(780.0,380.0);

glVertex2f(1000.0,1000.0);

glEnd();

glutPostRedisplay();

}

void fire()

{

tr += 0.01;

if(tr >10.0)

tr = 0.0;

glBegin(GL\_POLYGON);

glVertex2f(320.0,60.0);

glVertex2f(320.0,500.0);

glVertex2f(300.0,60.0);

glVertex2f(310.0,500.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(600.0,60.0);

glVertex2f(600.0,500.0);

glVertex2f(590.0,60.0);

glVertex2f(610.0,500.0);

glEnd();

glPushMatrix();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(tr,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(200.0,390.0);

glVertex2f(200.0,400.0);

glVertex2f(700.0,390.0);

glVertex2f(700.0,400.0);

glEnd();

glColor3f(0.5 - (tr/50),0.0,0.0);

DrawCircle(480.0,400.0,50.0,100);

DrawCircle(420.0,400.0,20.0,100);

glPopMatrix();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glColor3f(1.0,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(420.0,140.0);

glVertex2f(430.0,140.0);

glVertex2f(340.0,80.0);

glVertex2f(320.0,80.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(430.0,80.0);

glVertex2f(440.0,140.0);

glVertex2f(450.0,140.0);

glVertex2f(460.0,80.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(440.0,140.0);

glVertex2f(450.0,140.0);

glVertex2f(550.0,80.0);

glVertex2f(540.0,80.0);

glEnd();

glBegin(GL\_POLYGON);

glVertex2f(380.0,80.0);

glVertex2f(431.0,140.0);

glVertex2f(434.0,140.0);

glVertex2f(400.0,80.0);

glEnd();

glColor3f(1.0,0.0,0.0);

glutPostRedisplay();

}

void ground()

{

glClearColor(0.0,0.0,0.2,1.0);

glColor3f(0.2,0.0,0.0);

glBegin(GL\_POLYGON);

glVertex2f(0.0,0.0);

glVertex2f(0.0,300.0);

glVertex2f(1000.0,0.0);

glVertex2f(1000.0,300.0);

glEnd();

glColor3f(1.0,0.0,0.0);

glutPostRedisplay();

}

void cooking()

{ glPushMatrix();

glClear(GL\_COLOR\_BUFFER\_BIT | GL\_DEPTH\_BUFFER\_BIT);

glClearColor(0.0,0.0,0.2,0.0);

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

ground();

fire();

glColor3f(0.2,0.0,0.0);

cave();

glColor3f(0.2,0.0,0.0);

glTranslatef(0.0,fire1,0.0);

flames();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(-100.0,ash\_t[0]-300.0,0.0);

ash1();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(-100.0,ash\_t[2]-300.0,0.0);

ash3();

glMatrixMode(GL\_MODELVIEW);

glLoadIdentity();

glTranslatef(ash\_t[1]-100,ash\_t[1]-300.0,0.0);

ash2();

glPopMatrix();

glutPostRedisplay();

}

void page1()

{

glColor3f(0.8,.1,.2);

if(traflag == 0)

{

glTranslatef(0.0,100.0,0.0);

traflag = 1;

}

topic();

output(400,340,"SUBMITTED BY",fonts[0]);

glColor3f(.2,0.1,1);

output(450,300,"Nikhil K S",fonts[3]);

output(450,250,"Rishabh Rastogi",fonts[3]);

output(450,200,"Nidhin Pramod",fonts[3]);

glColor3f(0.1,0.1,0.1);

output(370,125," Press any key to continue...",fonts[0]);

glColor3f(0.5,.6,.1);

output(455,280,"1DS12CS055",fonts[0]);

output(450,230,"1DS12CS078",fonts[0]);

output(450,180,"1DS12CS053",fonts[0]);

}

void page2()

{

glColor3f(0.8,.1,.2);

topic();

glColor3f(0.1,0.1,0.1);

glColor3f(0.5,.6,.1);

output(640+400,300+400+100,"View these",fonts[3]);

glColor3f(0.6,0.3,0.7);

output(400+300,270+360,"Ancient ",fonts[2]);

output(420+300,240+340,"a.Hunting",fonts[3]);

output(420+300,210+335,"b.Fire",fonts[3]);

output(420+300,210+300,"c.Cooking",fonts[3]);

output(400+300,180+250,"Modern",fonts[2]);

output(420+300,180+210,"d.Communication",fonts[3]);

output(420+300,180+170,"e.City",fonts[3]);

output(420+300,180+130,"f.Town",fonts[3]);

}

void NormalKey(GLubyte key, GLint x, GLint y)

{

if(key==27)

{

f =2;

flag = 1;

}

if(f==1) //menu1 .. cover page

{

//if a key is pressed then goto menu

f=2;

}

if(f==2) //menu

{

switch(key)

{

case 'a':f=10;

glutPostRedisplay();

break;

case 'b':f=11;

glutPostRedisplay();

break;

case 'c':f=12;

glutPostRedisplay();

break;

case 'd':f=13;

glutPostRedisplay();

break;

case 'e':f=14;

glutPostRedisplay();

break;

case 'f':f =15;

glutPostRedisplay();

break;

case '3':exit(0);

}

}

dis();

}

void dis()

{

glClear( GL\_DEPTH\_BUFFER\_BIT | GL\_COLOR\_BUFFER\_BIT);

glClearColor(0.0,0.0,0.0,0.0);

if(f==10)

{

glClearColor(0.0,0.0,0.5,0.0);

Hunting();

if(flag ==1)

{

mov[0]=0.0;

mov[1]=0.0;

b =0.0;

by=0.0;

fire1=0.0;;

flag = 0;

}

}

else

if(f==12)

{

glClearColor(0.0,0.0,0.2,0.0);

cooking();

if(flag ==1)

{

mov[0]=0.0;

mov[1]=0.0;

b =0.0;

by=0.0;

fire1=0.0;;

flag = 0;

}

}

else

if(f==11)

{

glClearColor(0.0,0.0,0.2,0.0);

Fire\_used();

if(flag ==1)

{

mov\_stone[0] = 0.0;

stone\_flag = 0.0;

x1[0] = 0.0;

x2[0] =100.0;

ash\_t[0]=0.0;

ash\_t[1] =0.0;

ash\_t[2]=0.0;

flag = 0;

}

}

else

if(f == 14)

{

mordern\_scenary();

}

else

if( f==13 )

{

smartphone();

}

else

if( f == 15)

{

town();

if(flag == 1)

{

carvar =0.0;

flag = 0;

}

}

if(f==1)

page1();

if(f==2)

page2();

glutSwapBuffers();

}

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

{

glutInit(&argc,argv);

glutInitDisplayMode(GLUT\_RGB|GL\_DOUBLE);

glutInitWindowSize(1000,1000);

glutInitWindowPosition(0,0);

glutCreateWindow("The AGES");

glutDisplayFunc(dis);

glutKeyboardFunc(NormalKey);

init();

glutMainLoop();

}