```c
#include<stdio.h>

#include <windows.h>

#include <GL/glut.h>

#include<math.h>

#include <stdio.h>

#include <stdlib.h>

GLfloat theta[]={0.0,0.0,0.0};

int counter=0;

double winHt=10.0;

void HumanArm()

{

glPushMatrix();

glColor3f(0,0,1.0);

glTranslated(0.6,0.66,0.3);

glScaled(0.5,1.0,3.0);

glutSolidSphere(0.15,50,50);

glPopMatrix();

glPushMatrix();

glColor3f(0,0,1.0);

glTranslated(0.6,0.5,0.3);

glScaled(1.5,2.35,2);

glutSolidCube(0.15);

glPopMatrix();

glPushMatrix();

glColor3f(0.96,0.80,0.69);

glTranslated(0.6,0.33,0.3);
```

```
glScaled(1.5,1.0,3.0);

glutSolidSphere(0.11,50,50);

glPopMatrix();

glPushMatrix();

glColor3f(0.96,0.80,0.69);

glTranslated(0.6,0.2,0.4);

glScaled(1.5,2.35,2);

glutSolidCube(0.15);

glPopMatrix();

glPushMatrix();

glColor3f(0.96,0.80,0.69);

glTranslated(0.6,0.0,0.5);

glScaled(1.5,1.0,3.0);

glutSolidSphere(0.08,50,50);

glPopMatrix();

}


void HumanLeg()

{

glPushMatrix();

glColor3f(0,0,1.0);

glTranslated(0.6,0.66,0.3);

glScaled(0.5,1.0,3.0);

glutSolidSphere(0.15,50,50);

glPopMatrix();
```

```
glPushMatrix();

glColor3f(0.0,0.0,1.0);

glTranslated(0.6,0.5,0.3);

glScaled(2.0,2.35,2);

glutSolidCube(0.15);

glPopMatrix();


glPushMatrix();

glColor3f(0,0,1.0);

glTranslated(0.6,0.33,0.3);

glScaled(2.0,1.0,3.0);

glutSolidSphere(0.11,50,50);

glPopMatrix();


glPushMatrix();

glColor3f(0,0,1.0);

glTranslated(0.6,0.2,0.4);

glScaled(2.0,2.35,2);

glutSolidCube(0.15);

glPopMatrix();


glPushMatrix();

glColor3f(0.0,0.0,0.0);

glTranslated(0.6,0.01,0.7);

glScaled(1.0,0.02,3.0);

glutSolidCube(0.5);
```

```
        glPopMatrix();

}


void HumanBody()

{

    glPushMatrix();

    glColor3f(0,0,1.0);

    glTranslated(0,0.38,0);

    glScalef(3.0f,0.75f,2.0f);

    glutSolidCube(0.5);

    glPopMatrix();


    glPushMatrix();

    glColor3f(0,0,1.0);

    glTranslated(-0.3,0.22,0);

    glRotated(120,0,0,1);

    glScalef(0.6f,0.5f,2.0f);

    glutSolidCube(0.5);

    glPopMatrix();


    glPushMatrix();

    glColor3f(0,0,1.0);

    glTranslated(0.3,0.22,0);

    glRotated(60,0,0,1);

    glScalef(0.6f,0.5f,2.0f);

    glutSolidCube(0.5);
```

```
glPopMatrix();


glPushMatrix();//face
glColor3f(0.96,0.80,0.69);
glRotatef(0, 0.0, 1.0, 0.0);
glTranslatef(0.0, 0.6, 0.0);
glScalef(1.5f, 1.0f, 1.2f);
glutSolidCube(0.5);
glScalef(1.0f, 2.0f, 1.0f);
glPopMatrix();



glPushMatrix();//left eye
glColor3f(1.0, 1.0, 1.0);
glTranslated(1.0,1.1,5.0);
glScaled(0.3,0.19,0.2);
glutSolidSphere (0.3, 20, 20);
glPopMatrix();


glPushMatrix();
glColor3f(1.0, 1.0, 1.0); //right eye
glTranslated(1.5,1.11,5.0);
glScaled(0.3,0.2,0.2);
glutSolidSphere (0.3, 20, 20);
glPopMatrix();
```

```
    glPushMatrix();

    glColor3f(1.0,0,0);

    glTranslated(1.1,0.95,4.5);

    glRotated(100,1,0,0);

    glScaled(0.5,0.5,0);

    glutSolidCube(0.5);

    glPopMatrix();


    glPushMatrix();

    glColor3f(0,0,1.0);

    glTranslated(0,-0.0,0);

    glScalef(1.6f,0.8f,2.0f);

    glutSolidCube(0.5);

    glPopMatrix();
}


void HumanBody1()
{
    glPushMatrix();

    glColor3f(0,0,1.0);

    glTranslated(0,0.38,0);

    glScalef(3.0f,0.75f,2.0f);

    glutSolidCube(0.5);

    glPopMatrix();


    glPushMatrix();
```

```
glColor3f(0,0,1.0);

glTranslated(-0.3,0.22,0);

glRotated(120,0,0,1);

glScalef(0.6f,0.5f,2.0f);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glColor3f(0,0,1.0);

glTranslated(0.3,0.22,0);

glRotated(60,0,0,1);

glScalef(0.6f,0.5f,2.0f);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//face

glColor3f(0.96,0.80,0.69);

glRotatef(0, 0.0, 1.0, 0.0);

glTranslatef(0.0, 0.6, 0.0);

glScalef(1.5f, 1.0f, 1.2f);

glutSolidCube(0.5);

glScalef(1.0f, 2.0f, 1.0f);

glPopMatrix();


glPushMatrix();

glColor3f(0,0,1.0);
```

```
    glTranslated(0,-0.0,0);

    glScalef(1.6f,0.8f,2.0f);

    glutSolidCube(0.5);

    glPopMatrix();

}


void drawHuman()

{

HumanBody();

glPushMatrix();

glTranslated(.2,-0.3,-0.2);

HumanArm();

glPopMatrix();

glPushMatrix();

glTranslated(-1.4,-0.3,-0.2);

HumanArm();

glPopMatrix();

glPushMatrix();

glTranslated(-0.2,-0.7,-0.4);

HumanLeg();

glPopMatrix();

glPushMatrix();

glTranslated(-1.0,-0.7,-0.4);

HumanLeg();

glPopMatrix();

}
```

```
void drawHuman1()

{

HumanBody1();

glPushMatrix();

glTranslated(.2,-0.3,-0.2);

HumanArm();

glPopMatrix();

glPushMatrix();

glRotated(-60,1,0,0);

glTranslated(-1.4,-0.3,-0.2);

HumanArm();

glPopMatrix();

glPushMatrix();

glTranslated(-0.2,-0.7,-0.4);

HumanLeg();

glPopMatrix();

glPushMatrix();

glTranslated(-1.0,-0.7,-0.4);

HumanLeg();

glPopMatrix();

}


void initGL()

{
```

```
    glClearColor(0.0f, 0.7f, 1.0f, 0.0f); // Set background color to black and opaque

    glClearDepth(1.0f);

    glShadeModel(GL_SMOOTH);                    // Set background depth to farthest

    glEnable(GL_DEPTH_TEST);   // Enable depth testing for z-culling

    glDepthFunc(GL_LEQUAL);    // Set the type of depth-test

    glShadeModel(GL_SMOOTH);   // Enable smooth shading

    glHint(GL_PERSPECTIVE_CORRECTION_HINT, GL_NICEST);


}

void drawbutton()

{

glPushMatrix();

glScaled(3,3,3);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glScaled(2.5,2.5,3);

glTranslated(0.0,0.0,0.1);

glutSolidCube(0.5);

glPopMatrix();


}

void dropper()

{

glPushMatrix();//roof
```

```
glColor3f(0.196078,0.6,0.8);

glTranslated(0.0,1.5,0.60);

glScaled(8,2,2);

glutSolidCube(0.2);

glPopMatrix();


glPushMatrix();//dispenser handle1

glColor3f(0.847059,0.847059,0.74902);

glTranslated(-0.5,0.8,0.5);

glRotated(160,1,0,0);

glScaled(0.35,2.35,0.35);

glutSolidCube(0.2);

glPopMatrix();


glPushMatrix();//dispenser cube1

glColor3f(0.0,0.0,0.0);

glTranslated(-0.5,0.8,0.5);

glScaled(0.5,0.5,0.5);

glutSolidSphere(0.20,50,50);

glPopMatrix();


glPushMatrix();//dispenser handle2

glColor3f(0.847059,0.847059,0.74902);

glTranslated(-0.1,0.8,0.5);

glRotated(160,1,0,0);

glScaled(0.35,2.35,0.35);
```

```
glutSolidCube(0.2);

glPopMatrix();


glPushMatrix();//dispenser cube2

glColor3f(0.0,0.0,0.0);

glTranslated(-0.1,0.8,0.5);

glScaled(0.5,0.5,0.5);

glutSolidSphere(0.20,50,50);

glPopMatrix();


glPushMatrix();//dispenser handle3

glColor3f(0.847059,0.847059,0.74902);

glTranslated(0.3,0.8,0.5);

glRotated(160,1,0,0);

glScaled(0.35,2.35,0.35);

glutSolidCube(0.2);

glPopMatrix();


glPushMatrix();//dispenser cube3

glColor3f(0.0,0.0,0.0);

glTranslated(0.3,0.8,0.5);

glScaled(0.5,0.5,0.5);

glutSolidSphere(0.20,50,50);

glPopMatrix();


}
```

```
void drawcoinpicker()

{glColor3f(0.8,0.498039,0.196078);

glPushMatrix();

glTranslated(-0.1,-0.13,0.5);

glScaled(2.0,0.65,0.5);

glutSolidCube(0.5);

glPopMatrix();

glPushMatrix();

glTranslated(-0.1,0.3,0.5);

glScaled(2.0,0.65,0.5);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glTranslated(-0.46,0.0,0.5);

glScaled(0.5,0.65,0.5);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glTranslated(0.26,0.0,0.5);

glScaled(.5,0.65,0.5);

glutSolidCube(0.5);

glPopMatrix();
```

```
}

void drawcup()

{

glPushMatrix();//cup stand

glTranslated(-0.1,-0.13,0.5);

glScaled(2.0,0.65,0.5);

glColor3f(0.85,0.85,0.85);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//cup1

glColor3f(0.82,0.57,0.46);

glTranslated(-0.5,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();


glPushMatrix();//cup2

glColor3f(1.0,1.0,0.0);

glTranslated(-0.1,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();


glPushMatrix();//cup3

glColor3f(0.6,0.8,0.196078);
```

```
glTranslated(0.3,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();


}
void drawcup1()

{
glPushMatrix();//cup stand

glTranslated(-0.1,-0.13,0.5);

glScaled(2.0,0.65,0.5);

glColor3f(0.85,0.85,0.85);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//cup1

glColor3f(1.0,0.11,0.68);

glTranslated(-0.5,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();


glPushMatrix();//cup2

glColor3f(0.73,0.16,0.96);

glTranslated(-0.1,0.3,0.58);

glRotated(90,1,0,0);
```

```
glutSolidCone(.07,0.5,14,1);

glPopMatrix();


glPushMatrix();//cup3

glColor3f(1.0,0.5,0);

glTranslated(0.3,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();


}

void drawcup2()

{

glPushMatrix();//cup stand

glTranslated(-0.1,-0.13,0.5);

glScaled(2.0,0.65,0.5);

glColor3f(0.85,0.85,0.85);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//cup1

glColor3f(1.0,0.0,0.0);

glTranslated(-0.5,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();
```

```
glPushMatrix();//cup2

glColor3f(0.0,0.0,1.0);

glTranslated(-0.1,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();


glPushMatrix();//cup3

glColor3f(0.91,0.76,0.65);

glTranslated(0.3,0.3,0.58);

glRotated(90,1,0,0);

glutSolidCone(.07,0.5,14,1);

glPopMatrix();


}
void drawVmachine()

{


glPushMatrix();//body of vending machine

glScaled(3,7,2);

glColor3f(0.137255,0.37255,0.55863);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//button stand
```

```
glScaled(3,3,2);

glTranslated(-0.00,-0.33,0.06);

glColor3f(0.137255,0.37255,0.55863);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//vmachine base

glScaled(0.5,6,2);

glTranslated(1.2,-0.00,0.06);

glColor3f(0.137255,0.37255,0.55863);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//dropper roof

glTranslated(-0.1,1.0,0.5);

glScaled(2.0,0.5,0.5);

glRotated(45,1,0,0);

glColor3f(0.85,0.85,0.85);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//button1

glColor3f(0.82,0.57,0.46);

glTranslated(0.6,1.0,0.5);

glScaled(0.15,0.15,0.2);

drawbutton();
```

```
glPopMatrix();


glPushMatrix();//button2

glTranslated(0.6,0.65,0.5);

glScaled(0.15,0.15,0.2);

glColor3f(1.0,1.0,0.0);

drawbutton();

glPopMatrix();


glPushMatrix();//button3

glTranslated(0.6,0.3,0.5);

glScaled(0.15,0.15,0.2);

glColor3f(0.6,0.8,0.196078);

drawbutton();

glPopMatrix();


glPushMatrix();

dropper();

glPopMatrix();

glPushMatrix();

drawcup();

glPopMatrix();

glPushMatrix();

glTranslated(0.62,-0.1,0.5);

glScaled(0.15,0.15,0.2);

drawcoinpicker();
```

```
glPopMatrix();

}

void drawVmachine1()

{

glPushMatrix();//body of vending machine

glScaled(3,7,2);

glColor3f(1.0,0,0);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//button stand

glScaled(3,3,2);

glTranslated(-0.00,-0.33,0.06);

glColor3f(1.0,0,0);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//vmachine base

glScaled(0.5,6,2);

glTranslated(1.2,-0.00,0.06);

glColor3f(1.0,0,0);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//dropper roof
```

```
glTranslated(-0.1,1.0,0.5);

glScaled(2.0,0.5,0.5);

glRotated(45,1,0,0);

glColor3f(0.85,0.85,0.85);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//button1

glColor3f(1.0,0.11,0.68);

glTranslated(0.6,1.0,0.5);

glScaled(0.15,0.15,0.2);

drawbutton();

glPopMatrix();


glPushMatrix();//button2

glTranslated(0.6,0.65,0.5);

glScaled(0.15,0.15,0.2);

glColor3f(0.73,0.16,0.96);

drawbutton();

glPopMatrix();


glPushMatrix();//button3

glTranslated(0.6,0.3,0.5);

glScaled(0.15,0.15,0.2);

glColor3f(1.0,0.5,0);

drawbutton();
```

```
glPopMatrix();

glPushMatrix();
dropper();
glPopMatrix();

glPushMatrix();
drawcup1();
glPopMatrix();

glPushMatrix();
glTranslated(0.62,-0.1,0.5);
glScaled(0.15,0.15,0.2);
drawcoinpicker();
glPopMatrix();
}

void drawVmachine2()
{

glPushMatrix();//body of vending machine
glScaled(3,7,2);
glColor3f(0.13,0.37,0.31);
glutSolidCube(0.5);
glPopMatrix();

glPushMatrix();//button stand
glScaled(3,3,2);
```

```
glTranslated(-0.00,-0.33,0.06);

glColor3f(0.13,0.37,0.31);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//vmachine base

glScaled(0.5,6,2);

glTranslated(1.2,-0.00,0.06);

glColor3f(0.13,0.37,0.31);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//dropper roof

glTranslated(-0.1,1.0,0.5);

glScaled(2.0,0.5,0.5);

glRotated(45,1,0,0);

glColor3f(0.85,0.85,0.85);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();//button1

glColor3f(1.0,0.0,0.0);

glTranslated(0.6,1.0,0.5);

glScaled(0.15,0.15,0.2);

drawbutton();

glPopMatrix();
```

```
glPushMatrix();//button2

glTranslated(0.6,0.65,0.5);

glScaled(0.15,0.15,0.2);

glColor3f(0.0,0.0,1.0);

drawbutton();

glPopMatrix();


glPushMatrix();//button3

glTranslated(0.6,0.3,0.5);

glScaled(0.15,0.15,0.2);

glColor3f(0.91,0.76,0.65);

drawbutton();

glPopMatrix();


glPushMatrix();

dropper();

glPopMatrix();

glPushMatrix();

drawcup2();

glPopMatrix();

glPushMatrix();

glTranslated(0.62,-0.1,0.5);

glScaled(0.15,0.15,0.2);

drawcoinpicker();

glPopMatrix();
```

```
}

void drawbg()

{

    //surface

glPushMatrix();

glColor3f(0.0,1.0,0.0);

glTranslated(0,-2.5,-5);

glScaled(60,0.7,80);

glutSolidCube(0.5);

glPopMatrix();


//footpath

glPushMatrix();

glColor3f(0.36,0.20,0.15);

glTranslated(0,-1.8,-8.7);

glScaled(60,1.5,15);

glutSolidCube(0.5);

glPopMatrix();



glPushMatrix();//road

glColor3f(0.0,0.0,0.0);

glTranslated(0,-1.8,5.7);

glScaled(60,1.5,15);

glutSolidCube(0.5);
```

```
glPopMatrix();


glPushMatrix();

glColor3f(1.0,1.0,1.0);

glTranslated(7.5,0,8.8);

glScaled(3,0.3,1);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glColor3f(1.0,1.0,1.0);

glTranslated(4.5,0,8.8);

glScaled(3,0.3,1);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glColor3f(1.0,1.0,1.0);

glTranslated(1.5,0,8.8);

glScaled(3,0.3,1);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glColor3f(1.0,1.0,1.0);
```

```
glTranslated(-1.5,0,8.8);

glScaled(3,0.3,1);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glColor3f(1.0,1.0,1.0);

glTranslated(-4.5,0,8.8);

glScaled(3,0.3,1);

glutSolidCube(0.5);

glPopMatrix();


glPushMatrix();

glColor3f(1.0,1.0,1.0);

glTranslated(-7.5,0,8.8);

glScaled(3,0.3,1);

glutSolidCube(0.5);

glPopMatrix();


//wall


glPushMatrix();

glColor3f(0.847059,0.847059,0.7490);

glTranslated(0,2.5,-10);

glScaled(60,20,0.70);

glutSolidCube(0.5);
```

```
glPopMatrix();

}

void drawobjects()

{

glPushMatrix();

glTranslated(0,0.5,-8.5);//centre

drawVmachine1();

glPopMatrix();


glPushMatrix();

glTranslated(4,0.5,-8.5);//right

drawVmachine();

glPopMatrix();


glPushMatrix();

glTranslated(-4,0.5,-8.5);//left

drawVmachine2();

glPopMatrix();

drawbg();

}


void display()

{

glClear(GL_COLOR_BUFFER_BIT | GL_DEPTH_BUFFER_BIT); // Clear color and depth buffers

glMatrixMode(GL_MODELVIEW);     // To operate on model-view matrix

glLoadIdentity();              // Reset the model-view matrix
```

```
glMatrixMode(GL_PROJECTION);//set the camera

glLoadIdentity();

glOrtho(-winHt*64/48.0,winHt*64/48.0,-winHt,winHt,0.1,100.0);

glMatrixMode(GL_MODELVIEW);

glLoadIdentity();

gluLookAt(10.5,10.3,20.0,0.0,0.25,0.0,0.0,100.0,0.0);

glPushMatrix();

glRotatef(30,0.0,0.8,0.0);

glScaled(1.5,1.3,1.5);

drawobjects();

glPopMatrix();


switch(counter)

{

    case 1:

    glPushMatrix();

    glTranslated(20,0,-20);

    glScaled(0.8,3,0.4);

    drawHuman();

    glPopMatrix();

    break;


    case 2:

    glPushMatrix();

    glTranslated(17.2,0,-18.6);

    glScaled(0.8,3,0.4);
```

```
drawHuman();

glPopMatrix();

break;

case 3:

glPushMatrix();

glTranslated(14.4,0,-17.2);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 4:

glPushMatrix();

glTranslated(11.6,0,-15.8);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 5:

glPushMatrix();

glTranslated(8.8,0.5,-14.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 6:

glPushMatrix();
```

```
glTranslated(5.8,0.5,-13.0);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 7:

glPushMatrix();

glTranslated(2.8,0.5,-11.6);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 8:

glPushMatrix();

glTranslated(2.0,0.5,-11.5);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 9:

glPushMatrix();

glTranslated(-0.5,0.5,-11.5);

glScaled(0.8,3,0.4);

glRotated(-140,0,1,0);

drawHuman1();
```

```
glPopMatrix();

break;

case 10:

glPushMatrix();

glTranslated(0.5,0.5,-11.5);

glScaled(0.8,3,0.4);

glRotated(-140,0,1,0);

drawHuman1();

glPopMatrix();

break;

case 11:

glPushMatrix();

glTranslated(-3,0.5,-9.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 12:

glPushMatrix();

glTranslated(-5,0.5,-7.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;
```

```
case 13:
glPushMatrix();
glTranslated(-7,0.5,-5.6);
glScaled(0.8,3,0.4);
drawHuman();
glPopMatrix();
break;

case 14:
glPushMatrix();
glTranslated(-9,0.5,-3.6);
glScaled(0.8,3,0.4);
drawHuman();
glPopMatrix();
break;

case 15:
glPushMatrix();
glTranslated(-11,0.5,-1.6);
glScaled(0.8,3,0.4);
drawHuman();
glPopMatrix();
break;

case 16:
glPushMatrix();
```

```
glTranslated(-13,0.5,1.6);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 17:

glPushMatrix();

glTranslated(11.6,0,-15.8);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;
  case 18:

glPushMatrix();

glTranslated(8.8,0.5,-14.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;
case 19:

glPushMatrix();

glTranslated(6.0,0.5,-13.0);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();
```

```
break;

case 20:

glPushMatrix();

glTranslated(3.2,0.5,-11.6);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 21:

glPushMatrix();

glTranslated(0.4,0.5,-10.2);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 22:

glPushMatrix();

glTranslated(-2.4,0.5,-8.8);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 23:

glPushMatrix();
```

```
glTranslated(-5.2,0.5,-9.4);

glScaled(0.8,3,0.4);

glRotated(-140,0,1,0);

drawHuman1();

glPopMatrix();

break;
case 24:

glPushMatrix();

glTranslated(-5.2,0.5,-9.4);

glScaled(0.8,3,0.4);

glRotated(-140,0,1,0);

drawHuman1();

glPopMatrix();

break;

case 25:

glPushMatrix();

glTranslated(-7.2,0.5,-7.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 26:

glPushMatrix();

glTranslated(-9.2,0.5,-5.4);

glScaled(0.8,3,0.4);

drawHuman();
```

```
glPopMatrix();

break;

case 27:

glPushMatrix();

glTranslated(-11.2,0.5,-3.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 28:

glPushMatrix();

glTranslated(-13.2,0.5,-1.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 29:

glPushMatrix();

glTranslated(-15.2,0.5,1.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;
```

```
case 30:

glPushMatrix();

glTranslated(-17.2,0.5,3.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 31:

glPushMatrix();

glTranslated(8.8,0.5,-14.4);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 32:

glPushMatrix();

glTranslated(6.0,0.5,-13.0);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;

case 33:

glPushMatrix();

glTranslated(3.2,0.5,-11.6);

glScaled(0.8,3,0.4);
```

```
drawHuman();

glPopMatrix();

break;

case 34:

glPushMatrix();

glTranslated(0.4,0.5,-10.2);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 35:

glPushMatrix();

glTranslated(-2.4,0.5,-8.8);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 36:

glPushMatrix();

glTranslated(-4.4,0.5,-6.8);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;
```

```
case 37:

glPushMatrix();

glTranslated(-6.4,0.5,-6.8);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 38:

glPushMatrix();

glTranslated(-8.4,0.5,-6.8);

glScaled(0.8,3,0.4);

drawHuman();

glPopMatrix();

break;


case 39:

glPushMatrix();

glTranslated(-10.4,0.5,-6.8);

glScaled(0.8,3,0.4);

glRotated(-140,0,1,0);

drawHuman1();

glPopMatrix();

break;
```

```
case 40:
glPushMatrix();
glTranslated(-10.4,0.5,-6.8);
glScaled(0.8,3,0.4);
glRotated(-140,0,1,0);
drawHuman1();
glPopMatrix();
break;


case 41:
glPushMatrix();
glTranslated(-12.4,0.5,-4.8);
glScaled(0.8,3,0.4);
drawHuman();
glPopMatrix();
break;


case 42:
glPushMatrix();
glTranslated(-14.4,0.5,-2.8);
glScaled(0.8,3,0.4);
drawHuman();
glPopMatrix();
break;


case 43:
```

```
        glPushMatrix();

        glTranslated(-16.4,0.5,-0.8);

        glScaled(0.8,3,0.4);

        drawHuman();

        glPopMatrix();

        break;


         case 44:

        glPushMatrix();

        glTranslated(-18.4,0.5,1.2);

        glScaled(0.8,3,0.4);

        drawHuman();

        glPopMatrix();

        break;


         case 45:

        glPushMatrix();

        glTranslated(-20.4,0.5,3.2);

        glScaled(0.8,3,0.4);

        drawHuman();

        glPopMatrix();

        break;
    }
    glFlush();

            glutSwapBuffers();

    }
```

```c
void counterinc()

{

if(counter<=50)

   counter++;

else

   counter=1;

Sleep(800);

glutPostRedisplay();

}

void mouse(int btn,int state,int x,int y)

{

   if(btn==GLUT_LEFT_BUTTON && state==GLUT_DOWN)

   winHt+=0.5;

if(btn==GLUT_RIGHT_BUTTON && state==GLUT_DOWN)

   winHt-=0.5;

glutPostRedisplay();

}

int main(int argc, char** argv)

{

  glutInit(&argc, argv);

  glutInitDisplayMode(GLUT_DOUBLE | GLUT_RGB | GLUT_DEPTH);

  glutInitWindowSize(1400,700);

  glutInitWindowPosition(0,0);

  glutCreateWindow("3D Vending Machine");

  glutDisplayFunc(display);

  glutIdleFunc(counterinc);
```

```
    glutMouseFunc(mouse);

    glEnable(GL_DEPTH_TEST);

    initGL();

    glutMainLoop();

    return 0;


}
```