

```

#include <GL/gl.h>

#include <GL/glut.h>

#include<bits/stdc++.h>

void mouth(GLfloat rx, GLfloat ry, GLfloat cx, GLfloat cy)
{
    glBegin(GL_TRIANGLE_FAN);
    glColor3f(1.0f, 1.0f, 1.0f);
    glVertex2f(cx, cy);
    for (int i = 0; i <= 100; i++)
    {
        float angle = 2.0f * 3.1416f * i / 100;
        float x = rx * cosf(angle);
        float y = ry * sinf(angle);
        glVertex2f((x + cx), (y + cy));
    }
    glEnd();
}

void black(GLfloat rx, GLfloat ry, GLfloat cx, GLfloat cy)
{
    glBegin(GL_TRIANGLE_FAN);
    glColor3f(0.0f, 0.0f, 0.0f);
    glVertex2f(cx, cy);
    for (int i = 0; i <= 100; i++)
    {
        float angle = 2.0f * 3.1416f * i / 100;
        float x = rx * cosf(angle);
        float y = ry * sinf(angle);
        glVertex2f((x + cx), (y + cy));
    }
}

```

```
}
```

```
glEnd();
```

```
}
```

```
void nose(GLfloat rx, GLfloat ry, GLfloat cx, GLfloat cy)
```

```
{
```

```
glBegin(GL_TRIANGLE_FAN);
```

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

```
glVertex2f(cx, cy);
```

```
for (int i = 0; i <= 100; i++)
```

```
{
```

```
float angle = 2.0f * 3.1416f * i / 100;
```

```
float x = rx * cosf(angle);
```

```
float y = ry * sinf(angle);
```

```
glVertex2f((x + cx), (y + cy));
```

```
}
```

```
glEnd();
```

```
}
```

```
void head(GLfloat rx, GLfloat ry, GLfloat cx, GLfloat cy)
```

```
{
```

```
glBegin(GL_TRIANGLE_FAN);
```

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

```
glVertex2f(cx, cy);
```

```
for (int i = 0; i <= 100; i++)
```

```
{
```

```
float angle = 2.0f * 3.1416f * i / 100;
```

```
float x = rx * cosf(angle);
```

```
float y = ry * sinf(angle);
```

```
glVertex2f((x + cx), (y + cy));
```

```
}  
glEnd();  
}
```

```
void display(void)  
{  
/* clear all pixels */  
glClear (GL_COLOR_BUFFER_BIT);
```

```
head(35,38,0,20);  
black(24,28,0,12);  
mouth(23,27,0,12);  
black(9,11,-9,39);  
black(9,11,9,39);
```

```
black(17,12,0,4);//smile  
mouth(17,12,0,4.8);//smile
```

```
mouth(8,10,-9,39);////eye1  
mouth(8,10,9,39);////eye2  
black(3,3,-9,39);//eyeball1  
black(3,3,9,39);//eyeball2  
black(6,6,0,27);//nose  
nose(5,5,0,27);
```

```
////////////////////////////////body////////////////////////////////
```

```
////////////////////////////////main body
```

```
glColor3f (0.0, 0.0, 1.0);/////hand1
```

```
glBegin(GL_POLYGON);
```

```
glVertex2f(-16.0f, -19.0f );
```

```
glVertex2f(-18.0f, -35.0f );
```

```
glVertex2f(-35.0f, -40.0f );
```

```
glVertex2f(-38.0f, -32.0f );
```

```
glEnd();
```

```
glColor3f (0.0, 0.0, 1.0);/////hand2
```

```
glBegin(GL_POLYGON);
```

```
glVertex2f(16.0f, -19.0f );
```

```
glVertex2f(18.0f, -35.0f );
```

```
glVertex2f(35.0f, -40.0f );
```

```
glVertex2f(38.0f, -32.0f );
```

```
glEnd();
```

```
glColor3f (0.0, 0.0, 1.0);/////body
```

```
glBegin(GL_POLYGON);
```

```
glVertex2f(-20.0f, -21.50f );//
```

```
glVertex2f(-20.0f, -70.0f );  
glVertex2f(20.0f, -70.0f );  
glVertex2f(20.0f, -21.50f );//
```

```
glEnd();
```

```
black(8,5,0,-70);//  
black(11,4,-16,-71);//leg1  
black(11,4,16,-71);//leg2  
mouth(10,3,-16,-71);//leg1  
mouth(10,3,16,-71);//leg2  
black(7,7,-39,-38);//finger1  
black(7,7,39,-38);//finger1  
mouth(6,6,-39,-38);//finger1  
mouth(6,6,39,-38);//finger1
```

```
glColor3f (0.0, 0.0, 0.0);/////mouthline  
glBegin(GL_LINES);  
glVertex2f(0.0f, 20.0f );  
glVertex2f(0.0f, -7.0f );  
glEnd();
```

```
glColor3f (0.0, 0.0, 0.0);/////mustache//left  
glBegin(GL_LINES);  
glVertex2f(-18.0f, 15.0f );  
glVertex2f(-5.0f, 10.0f );  
glEnd();  
glColor3f (0.0, 0.0, 0.0);/////mustache//left
```

```
glBegin(GL_LINES);
glVertex2f(-18.0f, 8.0f );
glVertex2f(-5.0f, 8.0f );
glEnd();

glColor3f (0.0, 0.0, 0.0);////mustache//left
glBegin(GL_LINES);
glVertex2f(-18.0f, 3.0f );
glVertex2f(-5.0f, 6.0f );
glEnd();
```

```
glColor3f (0.0, 0.0, 0.0);////mustache//right
glBegin(GL_LINES);
glVertex2f(18.0f, 15.0f );
glVertex2f(5.0f, 10.0f );
glEnd();

glColor3f (0.0, 0.0, 0.0);////mustache//right
glBegin(GL_LINES);
glVertex2f(18.0f, 8.0f );
glVertex2f(5.0f, 8.0f );
glEnd();
```

```
glColor3f (0.0, 0.0, 0.0);////mustache//right
glBegin(GL_LINES);
glVertex2f(18.0f, 3.0f );
glVertex2f(5.0f, 6.0f );
glEnd();
```

```
black(19,20,0,-32);

mouth(18,19,0,-32);//belly

black(13,13,0,-32);
```

```
mouth(13,13,0,-31);
```

```
glColor3f (0.0, 0.0, 0.0);
```

```
glBegin(GL_LINES);////line for belly
```

```
glVertex2f(-13.0f, -35.50f );
```

```
glVertex2f(13.0f, -35.50f );
```

```
glEnd();
```

```
glColor3f (0.0, 0.0, 0.0);/////belt background
```

```
glBegin(GL_POLYGON);
```

```
glVertex2f(-18.0f, -20.0f );
```

```
glVertex2f(-18.0f, -13.0f );
```

```
glVertex2f(18.0f, -13.0f );
```

```
glVertex2f(18.0f, -20.0f );
```

```
glEnd();
```

```
glColor3f (1.0, 0.0, 0.0);/////belt
```

```
glBegin(GL_POLYGON);
```

```
glVertex2f(-17.0f, -19.0f );
```

```
glVertex2f(-17.0f, -14.0f );
```

```
glVertex2f(17.0f, -14.0f );
```

```
glVertex2f(17.0f, -19.0f );
```

```
glEnd();
```

```
glFlush ();
```

```

}

void init (void)
{
    /* select clearing (background) color */
    glClearColor (0.0, 0.0, 0.0, 0.0);
    /* initialize viewing values */
    glMatrixMode(GL_PROJECTION);
    glLoadIdentity();
    glOrtho(-100.0, 100.0, -100.0, 100.0, -10.0, 10.0);
}

```

```

int main(int argc, char** argv)
{
    glutInit(&argc, argv);
    glutInitDisplayMode (GLUT_SINGLE | GLUT_RGB);
    glutInitWindowSize (600, 600);
    glutInitWindowPosition (100, 100);
    glutCreateWindow ("SYEED MD TOWAHA(192-15-13126)");
    init ();
    glutDisplayFunc(display);
    glutMainLoop();
    return 0; /* ISO C requires main to return int. */
}

```


