

```

#include <GL/gl.h>

#include <GL/glut.h>

#include<bits/stdc++.h>

void circle(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 circle2(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 = 50; 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)////////////////////////////////////display-----
{
/* clear all pixels */
glClear(GL_COLOR_BUFFER_BIT);

glColor3f (1.0, 1.0, 0.0);
glBegin(GL_LINES);
//axix-X
glVertex2f(-100.0f, 0.0f );
glVertex2f(100.0f, 0.0f );
glEnd();
glColor3f (1.0, 1.0, 0.0);
glBegin(GL_LINES);
//axix-Y
glVertex2f(0.0f, 100.0f );
glVertex2f(0.0f, -100.0f );
glEnd();
//////////-----

```

```

glBegin(GL_POLYGON);//////////body
glColor3f (1.0, 0.0, 0.0);
glVertex2f(-40.0f, 0.0f );

```

```

glVertex2f(0.0f, 35.0f );
glVertex2f(40.0f, 0.0f );
glVertex2f(0.0f, -60.0f );

glEnd();

glBegin(GL_POLYGON);//////////tail
glColor3f (1.0, 1.0, 0.0);
glVertex2f(0.0f, -60.0f );
glVertex2f(15.0f, -80.0f );
glVertex2f(-15.0f, -80.0f );
//glVertex2f(0.0f, -60.0f );

glEnd();

circle(5, 7, -15, 5);
circle(5, 7, 15, 5);

circle2(7, 10, 0, -15);
glColor3f (1.0, 0.0, 0.0);
circle2(7, 10, 0, -13);
//rx,ry,cx,cy
glFlush();
}

void init(void)
{
glClearColor(0.0, 0.0, 0.0, 0.0);
glMatrixMode(GL_PROJECTION);

```

```
glLoadIdentity();
glOrtho(-100, 100, -100, 100, -15, 15);
//-x,x,-y,y
}

int main(int argc, char** argv)
{
    glutInit(&argc, argv);
    glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
    glutInitWindowSize(1000, 600);
    glutInitWindowPosition(100, 100);
    glutCreateWindow("Circle 192-15-13126");
    init();
    glutDisplayFunc(display);
    glutMainLoop();
    return 0; /* ISO C requires main to return int. */
}
```