

```
#include <windows.h>
```

```
#include <GL/glut.h>
```

```
#include <math.h>
```

```
void circle(GLfloat rx,GLfloat ry,GLfloat x,GLfloat y)
```

```
{
```

```
    int i=0;
```

```
    float angle;
```

```
    GLfloat PI = 3.1416;
```

```
    glBegin(GL_POLYGON);
```

```
    glVertex2f(x,y);
```

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

```
    {
```

```
        angle = i*PI /180;
```

```
        glVertex2f(x+(cos(angle)*rx),y+(sin(angle)*ry));
```

```
    }
```

```
    glEnd();
```

```
}
```

```
void w(GLfloat rx,GLfloat ry,GLfloat x,GLfloat y)
```

```
{
```

```
    int i=0;
```

```
    float angle;
```

```
    GLfloat PI = 3.1416;
```

```
    glBegin(GL_POLYGON);
```

```
    glVertex2f(x,y);
```

```
    for(i=0;i<=90;i++)
```

```
    {
```

```
        angle = i*PI /180;
```

```

        glVertex2f(x+(cos(angle)*rx),y+(sin(angle)*ry));
    }
    glEnd();
}

```

```

void w1(GLfloat rx,GLfloat ry,GLfloat x,GLfloat y)
{
    int i=0;
    float angle;
    GLfloat PI = 3.1416;
    glBegin(GL_POLYGON);
    glVertex2f(x,y);
    for(i=90;i<=180;i++)
    {
        angle = i*PI /180;
        glVertex2f(x+(cos(angle)*rx),y+(sin(angle)*ry));
    }
    glEnd();
}

```

```

void display() {
    glClearColor(1.0f, 1.0f, 1.0f, 1.0f);
    glOrtho(-100, 100, -100, 100, -100, 100);
    glClear(GL_COLOR_BUFFER_BIT);
}

```

```
    glColor3f(1, 0, 1);  
circle(2, 3, 0, 50);
```

```
    glColor3f(1, 0, 0);  
w(50, 50, 0, 0);  
    glColor3f(0, 1, 0);  
w(25, 50, 0, 0);
```

```
    glColor3f(0, 0, 1);  
w1(50, 50, 0, 0);  
    glColor3f(0, 1, 1);  
w1(25, 50, 0, 0);
```

```
    glColor3f(1, 1, 1);  
circle(12.5, 5, 12.5, 0);
```

```
circle(12.5, 5, 37.5, 0);
```

```
circle(12.5, 5, -12.5, 0);
```

```
circle(12.5, 5, -37.5, 0);
```

```
glBegin(GL_QUADS);  
    glColor3f(1.0f, 0.0f, 1.0f);  
    glVertex2f(-2.0f, 1.0f);  
    glVertex2f(2.0f, 1.0f);  
    glVertex2f(2.0f, -30.0f);  
    glVertex2f(-2.0f, -30.0f);  
glEnd();
```

```
    glFlush();  
}
```

```
int main(int argc, char** argv) {  
    glutInit(&argc, argv);  
    glutCreateWindow("Simple Line Strip");  
    glutInitWindowSize(700, 700);  
    glutInitWindowPosition(50, 50);  
    glutDisplayFunc(display);  
    glutMainLoop();  
  
    return 0;  
}
```