```
#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<=30;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=60;i<=90;i++)
    {
        angle = i*PI /180;
        glVertex2f(x+(cos(angle)*rx),y+(sin(angle)*ry));
    }
    glEnd();
}
void w2(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=120;i<=150;i++)
    {
        angle = i*PI /180;
```

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

void w3(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=180;i<=210;i++)
    {
        angle = i*PI /180;
        glVertex2f(x+(cos(angle)*rx),y+(sin(angle)*ry));
    }
    glEnd();
}

void w4(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=240;i<=270;i++)
    {
```

```
        angle = i*PI /180;
        glVertex2f(x+(cos(angle)*rx),y+(sin(angle)*ry));
    }
    glEnd();
}

void w5(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=300;i<=330;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);
```

```
//black circle
   glColor3f(0, 0, 0);
   circle(51, 51, 0, 0);




   // red circle
      glColor3f(1, 0, 0);
   circle(40, 40, 0, 0);
//black circle 2
   glColor3f(0, 0, 0);
   circle(38, 38, 0, 0);

   glColor3f(1, 1, 1);
   w(38, 38, 0, 0);

      glColor3f(1, 1, 1);
   w1(38, 38, 0, 0);

      glColor3f(1, 1, 1);
   w2(38, 38, 0, 0);

         glColor3f(1, 1, 1);
   w3(38, 38, 0, 0);
```

```
        glColor3f(1, 1, 1);
    w4(38, 38, 0, 0);

        glColor3f(1, 1, 1);
    w5(38, 38, 0, 0);


//green cricle
    glColor3f(0, 1, 0);
    circle(27, 27, 0, 0);
//black circle 3
    glColor3f(0, 0, 0);
    circle(25.5, 25.5, 0, 0);

      glColor3f(1, 1, 1);
    w(25.5, 25.5, 0, 0);

      glColor3f(1, 1, 1);
    w1(25.5, 25.5, 0, 0);

      glColor3f(1, 1, 1);
    w2(25.5, 25.5, 0, 0);

        glColor3f(1, 1, 1);
    w3(25.5, 25.5, 0, 0);

        glColor3f(1, 1, 1);
    w4(25.5, 25.5, 0, 0);
```

```
        glColor3f(1, 1, 1);
    w5(25.5, 25.5, 0, 0);

    //green cricle 2
    glColor3f(0, 1, 0);
    circle(10, 10, 0, 0);
//red cricle 2
    glColor3f(1, 0, 0);
    circle(5, 5, 0, 0);

    glFlush();
}

int main(int argc, char** argv) {
    glutInit(&argc, argv);
    glutCreateWindow("Simple Line Strip");
    glutInitWindowSize(520, 520);
    glutInitWindowPosition(50, 50);
    glutDisplayFunc(display);
    glutMainLoop();

    return 0;
}
```