```cpp
#include "gwm.h"

void main (void)
{
    // declarations
    void initFunc(void);
    void keyboardFunc(unsigned int);
    void displayFunc(void);
    void reshapeFunc(int, int);

    // code
    gwmInitializeCallback(initFunc);
    gwmKeyboardCallback(keyboardFunc);
    gwmDisplayCallback(displayFunc);
    gwmReshapeCallback(reshapeFunc);

    gwmCreateWindow("Perspective Triangle", 100, 100, 800, 600);
    gwmEventLoop();
}

void initFunc(void)
{
    // clear the depth buffer
    glClearDepth(1.0f);

    // clear the screen by OpenGL
    glClearColor(0.0f, 0.0f, 0.0f, 1.0f);

    // enable depth
    glEnable(GL_DEPTH_TEST);
    glDepthFunc(GL_LEQUAL);

    glShadeModel(GL_SMOOTH);
    glHint(GL_PERSPECTIVE_CORRECTION_HINT, GL_NICEST);
}

void keyboardFunc(unsigned int key)
{
    // VK_ESCAPE
    if(key == 0x1B)
    {
        gwmExitEventLoop();
    }
}

void reshapeFunc(int width, int height)
{
    glMatrixMode(GL_PROJECTION);
    glLoadIdentity();

    glViewport(0, 0, width, height);
    gluPerspective(45.0, (float)width / (float)height, 0.1f, 100.0f);
```

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53
54  }
55
56  void displayFunc(void)
57  {
58      // code
59      glClear(GL_COLOR_BUFFER_BIT | GL_DEPTH_BUFFER_BIT);
60
61      glMatrixMode(GL_MODELVIEW);
62      glLoadIdentity();
63      glTranslatef(0.0f, 0.0f, -3.0f);
64
65      glBegin(GL_TRIANGLES);
66
67      glColor3f(1.0f, 0.0f, 0.0f);
68      glVertex2f(0.0f, 1.0f);
69      glColor3f(0.0f, 1.0f, 0.0f);
70      glVertex2f(-1.0f, -1.0f);
71      glColor3f(0.0f, 0.0f, 1.0f);
72      glVertex2f(1.0f, -1.0f);
73
74      glEnd();
75
76      gwmSwapBuffers();
77  }
78
79
```