

파일(F) 편집(E) 보기(V) Git(G) 프로젝트(P) 빌드(B) 디버그(D) 테스트(S) 분석(N) 도구(T) 확장(X) 창(W) 도움말(H) 검색 CG_Practice

로그인 GitHub Copilot

CG_Practice03.cpp CG_Practice02.cpp CG_Practice01.cpp CG_Practice04.cpp CG_Practice03.cpp CG_Practice02.cpp CG_Practice01.cpp CG_Practice06.cpp CG_Practice05.cpp CG_Practice04.cpp CG_Practice03.cpp CG_Practice02.cpp

CG_Practice03

```

1 #include <GL/glut.h>
2 #include <GL/glu.h>
3 #include <GL/glx.h>
4 #include <math.h>
5
6 GLfloat MyVertices[8][3] = {
7     { -0.25, -0.25, 0.25 },
8     { -0.25, 0.25, 0.25 },
9     { 0.25, 0.25, 0.25 },
10    { 0.25, -0.25, 0.25 },
11    { 0.25, -0.25, -0.25 },
12    { 0.25, 0.25, -0.25 },
13    { -0.25, 0.25, -0.25 },
14    { -0.25, -0.25, -0.25 }
15 };
16
17 GLfloat MyColors[8][3] = {
18     { 1.0, 0.0, 0.0 },
19     { 1.0, 1.0, 0.0 },
20     { 0.0, 1.0, 0.0 },
21     { 0.0, 0.0, 1.0 },
22     { 1.0, 0.0, 1.0 },
23     { 1.0, 1.0, 1.0 },
24     { 0.0, 1.0, 1.0 },
25     { 0.0, 0.0, 1.0 }
26 };
27
28 GLuint MyVertexList[24] = {
29     0, 3, 2, 1,
30     2, 3, 7, 6,
31     0, 1, 5, 4,
32     4, 2, 8, 7,
33     4, 6, 7, 5,
34     0, 1, 6, 4
35 };
36
37 GLuint MyCuboidID;
38
39 void MyCreateUI() {
40     MyCuboidID = glGenLists(1);
41     glNewList(MyCuboidID, GL_COMPILE);
42
43     glClear(GL_COLOR_BUFFER_BIT);
44
45     glFrontFace(GL_CW);
46     glEnable(GL_CULL_FACE);
47
48     glEnableClientState(GL_COLOR_ARRAY);
49     glEnableClientState(GL_VERTEX_ARRAY);
50
51     glColorPointer(3, GL_FLOAT, 0, MyColors);
52     glVertexPointer(3, GL_FLOAT, 0, MyVertices);
53
54     for (GLint i = 0; i < 6; ++i) {
55         glDrawElements(GL_UNSIGNED_BYTE, MyVertexList[i * 4], i);
56     }
57
58     glBindClientState(GL_COLOR_ARRAY);
59     glBindClientState(GL_VERTEX_ARRAY);
60
61     glEndList();
62 }
63
64 void MyDisplay() {
65     glClear(GL_COLOR_BUFFER_BIT);
66
67     glMatrixMode(GL_MODELVIEW);
68
69     glLoadIdentity();
70
71     glRotated(30.0, 1.0, 1.0, 0.0);
72
73     glCallList(MyCuboidID);
74
75     glFlush();
76 }
77
78 int main(int argc, char** argv) {
79     glutInit(&argc, argv);
80     glutInitDisplayMode(GLUT_RGB);
81     glutInitWindowSize(300, 300);
82     glutInitWindowPosition(0, 0);
83     glutCreateWindow("My Cube");
84
85     glClearColor(1.0, 1.0, 1.0, 1.0);
86
87     glMatrixMode(GL_PROJECTION);
88     glLoadIdentity();
89     gluOrtho2D(-1.0, 1.0, -1.0, 1.0, 0.0, 1.0);
90
91     MyCreateUI();
92
93     glutDisplayFunc(MyDisplay);
94
95     glutMainLoop();
96
97     return 0;
98 }

```

솔루션 탐색기

솔루션 탐색기 검색(Ctrl+.)

솔루션 'CG_Practice' (3 프로젝트의 3)

- CG_Practice
 - 외부 종속성
 - 리소스 파일
 - 소스 파일
 - CG_Practice.cpp
 - CG_Practice01.cpp
 - CG_Practice02.cpp
 - CG_Practice03.cpp
 - CG_Practice04.cpp
 - CG_Practice05.cpp
 - 헤더 파일
- CG_Practice02
 - 외부 종속성
 - 리소스 파일
 - 소스 파일
 - CG_Practice01.cpp
 - CG_Practice02.cpp
 - CG_Practice03.cpp
 - CG_Practice04.cpp
 - CG_Practice05.cpp
 - 헤더 파일
- CG_Practice03
 - 외부 종속성
 - 리소스 파일
 - 소스 파일
 - CG_Practice01.cpp
 - CG_Practice02.cpp
 - CG_Practice03.cpp
 - CG_Practice04.cpp
 - CG_Practice05.cpp
 - 헤더 파일

백준혁

문제가 검색되지 않음 | 풀: 68 문자: 5 탐 CRLF

출력

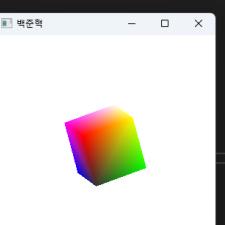
출력 보기 선택(S): 빌드

1:D:\%Computer_Graphics%\CG_Practice\CG_Practice03\CG_Practice03\Debug\CG_Practice03.exe: warning C4305: 초기화 중: 'double'에서 'GLfloat'(으)로 잘립니다.
1:D:\%Computer_Graphics%\CG_Practice\CG_Practice03\CG_Practice03\Debug\CG_Practice03.exe: warning C4305: 초기화 중: 'double'에서 'GLfloat'(으)로 잘립니다.
1:CG_Practice03.vcxproj -> D:\%Computer_Graphics%\CG_Practice\CG_Practice03\Debug\CG_Practice03.exe
1:"CG_Practice03.vcxproj" 프로젝트를 빌드했습니다.
===== 빌드 1개 성공, 0개 실패, 0개 최신 상태, 0개 건너뜀 ======
===== 빌드 0(가) 오후 5:29에 완료되었으며, 00.453 초이(가) 걸림 ======

GitHub Copilot 채팅 | 솔루션 탐색기 | Git 변경 내용

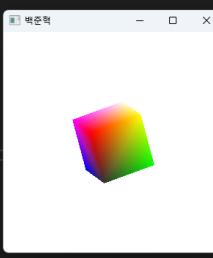
↑ 소스 제어에 추가 ▾ 리포지토리 선택 ▾

빌드 성공



```
CG_Practice03.cpp CG_Practice02.cpp CG_Practice01.cpp CG_Practice04.cpp CG_Practice03.cpp CG_Practice02.cpp CG_Practice01.cpp CG_Practice03.cpp

35
36
37     GLuint MyCubeListID;
38
39     void MyCreateList() {
40         MyCubeListID = glGenLists(1);
41         glNewList(MyCubeListID, GL_COMPILE);
42
43         glClear(GL_COLOR_BUFFER_BIT);
44
45         glFrontFace(GL_CW);
46         glEnable(GL_CULL_FACE);
47
48         glEnable(GL_CLIENTSTATE(GL_COLOR_ARRAY));
49         glEnable(GL_CLIENTSTATE(GL_VERTEX_ARRAY));
50
51         glColorPointer(3, GL_FLOAT, 0, MyColors);
52         glVertexPointer(3, GL_FLOAT, 0, MyVertices);
53
54         for (GLint i = 0; i < 6; i++) {
55             glDrawElements(GL_POLYGON, 4, GL_UNSIGNED_BYTE, &MyvertexList[4 * i]);
56         }
57
58         glDisableClientState(GL_COLOR_ARRAY);
59         glDisableClientState(GL_VERTEX_ARRAY);
60
61         glEndList();
62     }
63
64     void MyDisplay() {
65         glClear(GL_COLOR_BUFFER_BIT);
66
67         glMatrixMode(GL_MODELVIEW);
68         glShadeModel(GL_SMOOTH);
69         glLoadIdentity();
70
71         glRotatef(30.0, 1.0, 1.0, 1.0);
72
73         glCallList(MyCubeListID);
74
75         glFlush();
76     }
77
78     int main(int argc, char** argv) {
79         glutInit(&argc, argv);
80         glutInitDisplayMode(GLUT_RGB);
81         glutInitWindowSize(300, 300);
82         glutInitWindowPosition(0, 0);
83         glutCreateWindow("박준혁");
84
85         glClearColor(1.0, 1.0, 1.0, 1.0);
86
87         glEnable(GL_PROJECTION);
88         glLoadIdentity();
89         gluOrtho(-1.0, 1.0, -1.0, 1.0, -1.0, 1.0);
90
91     }
92
93     문제가 감지되지 않습니다.
94
95
96
97
98
99
100 %
```



The screenshot shows the Visual Studio IDE interface. The top menu bar includes '로그인' (Login), 'GitHub', and other standard options. The title bar displays three open files: 'CG_Practice06.cpp', 'CG_Practice05.cpp', and 'CG_Practice04.cpp'. The left sidebar contains a 'yDisplay' node under '해당 프로젝트의 파일 목록'. The 'Solution Explorer' window on the right shows a project structure for 'CG_Practice03':

- 솔루션 탐색기
- 솔루션 탐색기 검색(Ctrl+F)
- 솔루션 'CG_Practice' (3 프로젝트의 3)
- CG_Practice
- CG_Practice02
- CG_Practice03
- 파일
- 외부 솔루션
- 리소스 파일
- 소스 파일
- CG_Practice01.cpp
- CG_Practice02.cpp
- CG_Practice03.cpp
- 적어 파일

The 'Task List' window at the bottom shows several tasks:

- CG_Practice03.cpp
- CG_Practice02.cpp
- CG_Practice01.cpp
- CG_Practice04.cpp
- CG_Practice03.cpp
- CG_Practice02.cpp

The 'Code Editor' window at the bottom shows the content of 'CG_Practice03.cpp':

```
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40 void MyCreateList();
MyCreateList()
{
    MyCreateListID = glGenLists(1);
```



```
42
43     glNewList(MyCubeList, GL_COMPILE);
44
45     glClear(GL_COLOR_BUFFER_BIT);
46
47     glFrontFace(GL_CW);
48     glEnable(GL_CULL_FACE);
49
50     glEnableClientState(GL_COLOR_ARRAY);
51     glEnableClientState(GL_VERTEX_ARRAY);
52
53     glColorPointer(3, GL_FLOAT, 0, MyColors);
54     glVertexPointer(3, GL_FLOAT, 0, MyVertices);
55
56     for (GLuint i = 0; i < 6; ++i) {
57         glDrawElements(GL_POLYGON, 4, GL_UNSIGNED_BYTE, &MyVertexList[4 * i]);
58     }
59
60     glDisableClientState(GL_COLOR_ARRAY);
61     glDisableClientState(GL_VERTEX_ARRAY);
62
63     glEndList();
64
65     void MyDisplay() {
66         glClear(GL_COLOR_BUFFER_BIT);
67
68         glMatrixMode(GL_MODELVIEW);
69         glShadeModel(GL_FLAT);
70         glLoadIdentity();
71
72         glRotatef(90.0, 1.0, 1.0, 1.0);
73
74         glCallList(MyCubeList);
75
76         glFlush();
77     }
78
79     int main(int argc, char** argv) {
80         glutInit(&argc, argv);
81         glutInitDisplayMode(GL_RGB);
82         glutInitWindowSize(250, 200);
83         glutInitWindowPosition(0, 0);
84         glutCreateWindow("OpenGL");
85
86         glClearColor(1.0, 1.0, 1.0, 1.0);
87
88         glMatrixMode(GL_PROJECTION);
89         glLoadIdentity();
90         gluPerspective(45.0, 1.0, -1.0, 1.0, -1.0, 1.0);
91
92         glutDisplayFunc(MyDisplay);
93     }

```

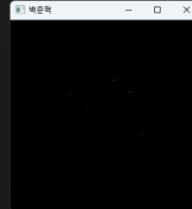




```
파일(Alt+F) 편집(Alt+E) 표시(W) GR(G) 표시모드(P) 빌드(B) 디버그(D) 테스터(S) 분석(N) 도구(T) 확장(X) 창(W) 도움말(H) 도움말(H) 검색... CG_Practice

CG_Practice03.cpp CG_Practice02.cpp CG_Practice01.cpp CG_Practice04.cpp CG_Practice03.cpp CG_Practice02.cpp CG_Practice01.cpp CG_Practice.cpp CG_Practice06.cpp CG_Practice05.cpp CG_Practice04.cpp CG_Practice04.cpp

CG_Practice03
50
51     for(GLint i = 0; i < 6; i++) {
52         gDrawElements(GL_POLYGON, 4, GL_UNSIGNED_BYTE, &MyVertexList[4 * i]);
53     }
54
55     glDisableClientState(GL_COLOR_ARRAY);
56     glDisableClientState(GL_VERTEX_ARRAY);
57
58     glEndList();
59
60
61     void MyDisplay() {
62         glClear(GL_COLOR_BUFFER_BIT);
63
64         glMatrixMode(GL_MODELVIEW);
65
66         glLoadIdentity();
67
68         glPolygonMode(GL_FRONT_AND_BACK, GL_POINT);
69
70         glRotatef(30.0, 1.0, 1.0);
71
72         glCallList(MyCubeListID);
73
74         glFlush();
75
76     }
77
78     int main(int argc, char** argv) {
79         glutInit(&argc, argv);
80         glutInitDisplayMode(GLUT_RGB);
81         glutInitWindowSize(640, 480);
82         glutInitWindowPosition(0, 0);
83         glutCreateWindow("박준혁");
84
85         glClearColor(0.0, 0.0, 1.0);
86
87         glMatrixMode(GL_PROJECTION);
88         glLoadIdentity();
89         glOrtho(-1.0, 1.0, -1.0, 1.0, -1.0, 1.0);
90
91         MyCreateList();
92
93         glutDisplayFunc(MyDisplay);
94
95         glutMainLoop();
96
97         return 0;
98
99 }
```



A screenshot of the GitHub Copilot interface. The top navigation bar includes tabs for '로그인', '내 프로젝트' (My Projects), 'GitHub Copilot', and 'GitHub Copilot API'. The main area features a code editor with the following code:`1>CG_Practice03.cpp' 프로젝트를 열었습니다.
GitHub Copilot 파일 | 출판선 헬퍼 | GitHub 사용
소스 제작에 추가 | 파일 허용자 확인 선택`

The code editor displays the following C++ code:`#include <iostream>
#include <vector>
#include <algorithm>
#include <functional>

using namespace std;`

To the left of the code editor is a file tree titled '출판선 헬퍼(Cpp)'. It shows a project structure with several files and folders:

- 출판선 헬퍼(Cpp) (프로젝트 3)
 - CG_Practice
 - CG_Practice02
 - CG_Practice03
 - 소스 파일
 - CG_Practice01.cpp
 - CG_Practice02.cpp
 - CG_Practice03.cpp
 - 해당 파일