

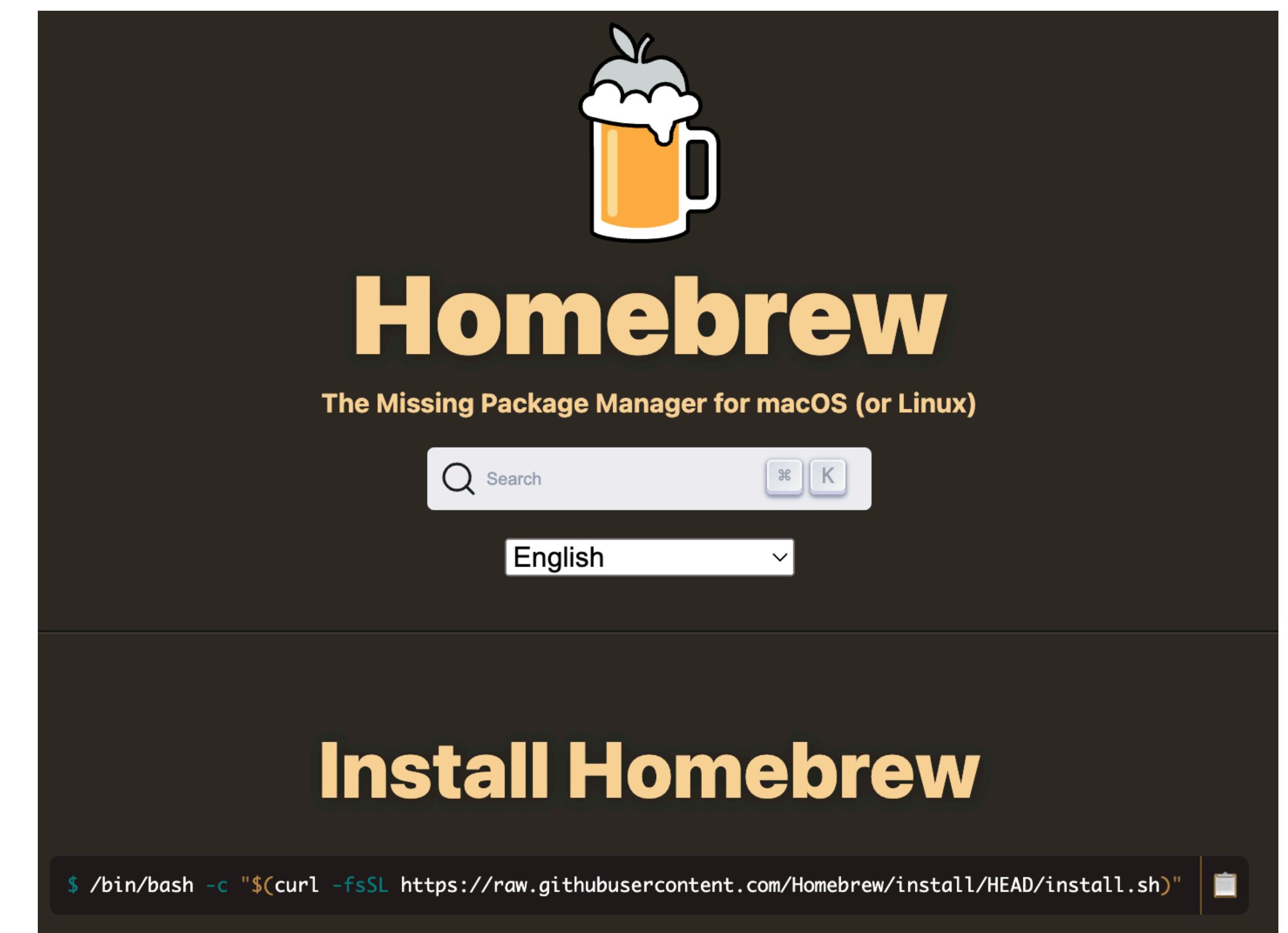
# MacOS OpenGL 초기설정

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# homebrew 이용하여 라이브러리 설치

homebrew : <https://brew.sh/>

- 터미널에서 brew install freeglut glew glm명령어 실행
- apple silicon은 arch -arm64 brew install



# glfw 설치

glfw는 homebrew로 설치시 dynamic library만 설치되므로 직접 설치

<https://www glfw.org/download.html>

The screenshot shows the official GLFW download page. At the top, there's a navigation bar with icons for back, forward, search, and other site functions. The URL 'glfw.org/download.html' is in the address bar. To the right of the address bar are several small icons.

The main content area has a light gray background. It starts with a paragraph about the source package, followed by two orange buttons: 'Source package' and 'GitHub repository'. Below this, there's a section for 'Windows pre-compiled binaries' with descriptions for 64-bit and 32-bit Windows binaries, each with an orange button. Then there's a section for 'macOS pre-compiled binaries' with a description and an orange button labeled '64-bit macOS binaries' which is highlighted with a red border. Finally, there's a section for 'Linux and BSD binaries'.

This package contains the complete source code with CMake build files, documentation, examples and test programs. It is the recommended download for all platforms and offers the most control.

All development is done on GitHub. The `master` branch is our integration branch for the next feature release while the `3.3-stable` branch only adds bug fixes for patch releases.

**Windows pre-compiled binaries**

These packages contain the GLFW header files, documentation and release mode static libraries, DLLs and import libraries for Visual C++ 2010-2019 and the 2022 preview, MinGW-w64 and plain MinGW.

Binaries for Visual C++ 2010 and plain MinGW are only available in the 32-bit package.

**macOS pre-compiled binaries**

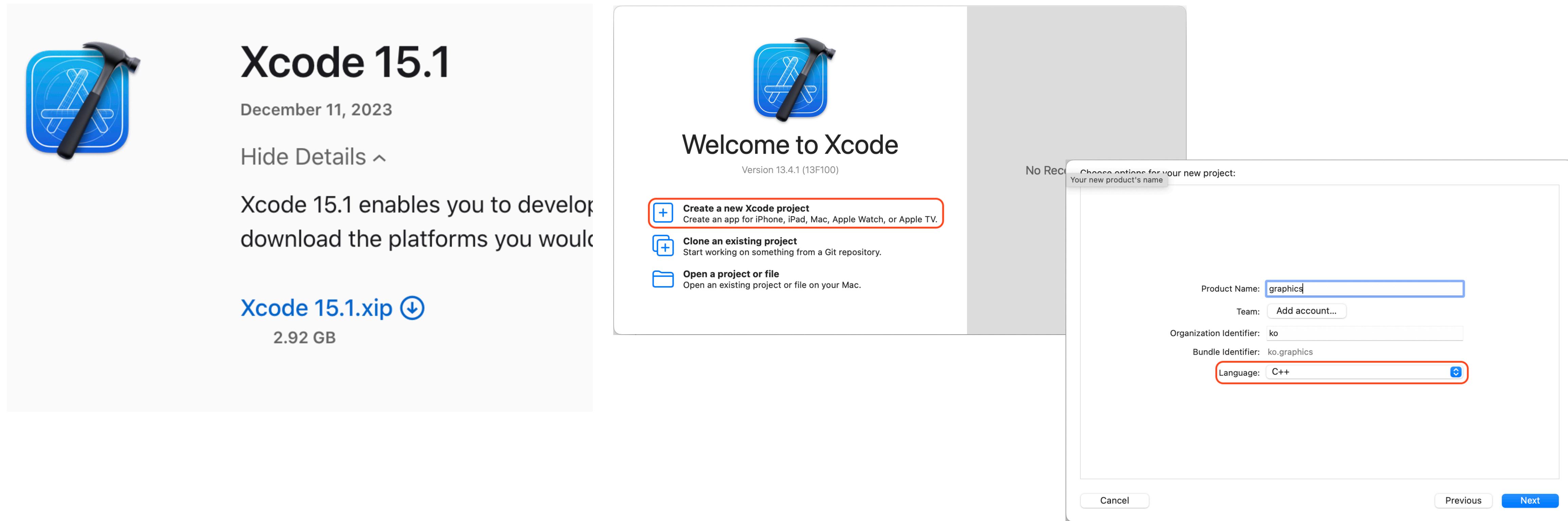
This package contains the GLFW header files, documentation and release mode static and dynamic libraries for macOS 10.8 and later. Both Intel, ARM and Universal binaries are included.

**Linux and BSD binaries**

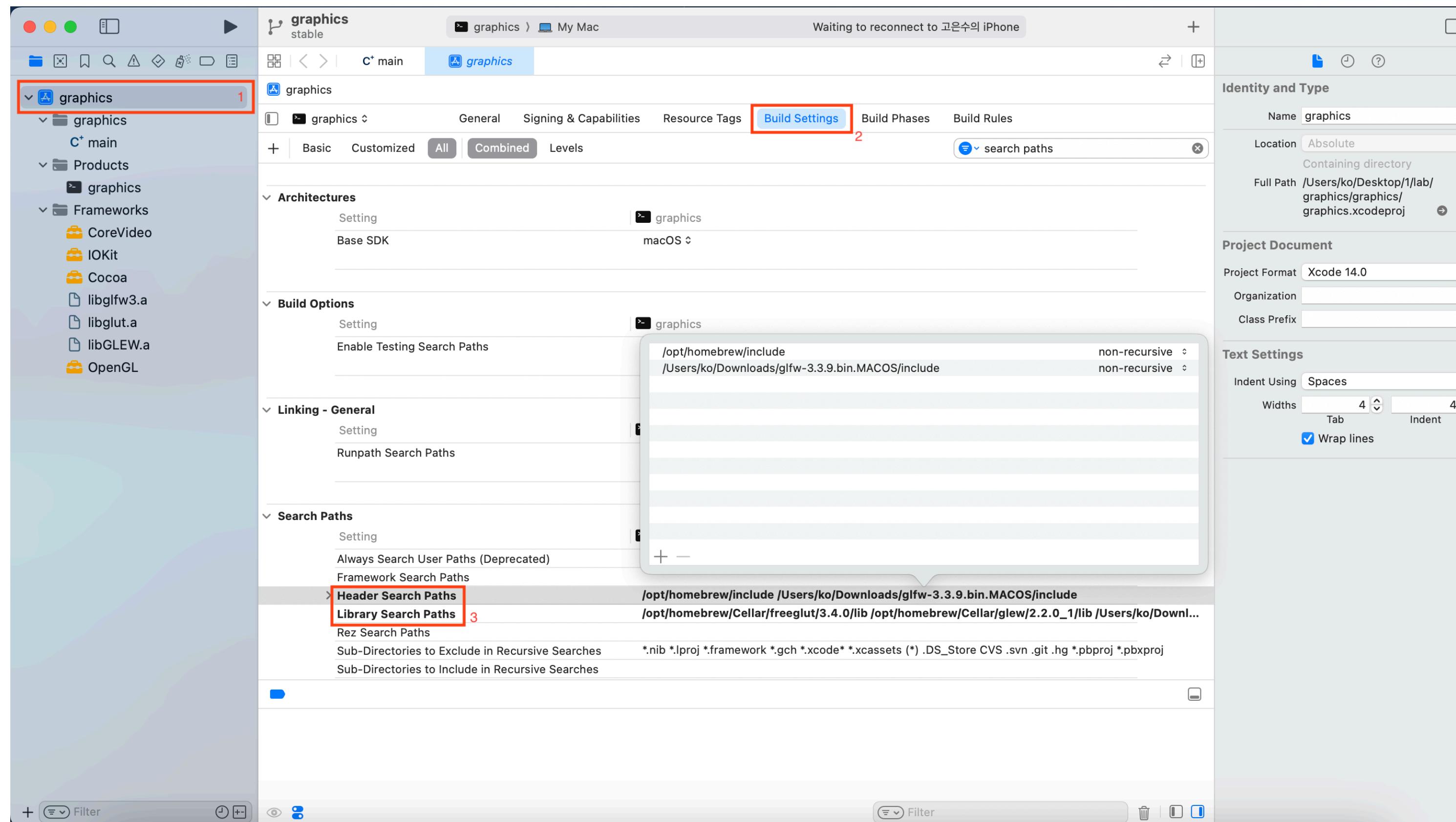
# Xcode 프로젝트 생성

애플 개발자 사이트 [developer.apple.com/download/more/](https://developer.apple.com/download/more/) 에서 Xcode 설치

Xcode에서 Mac > Command line tool 선택후 원하는 디렉토리에 프로젝트 생성.



# Header search paths 추가



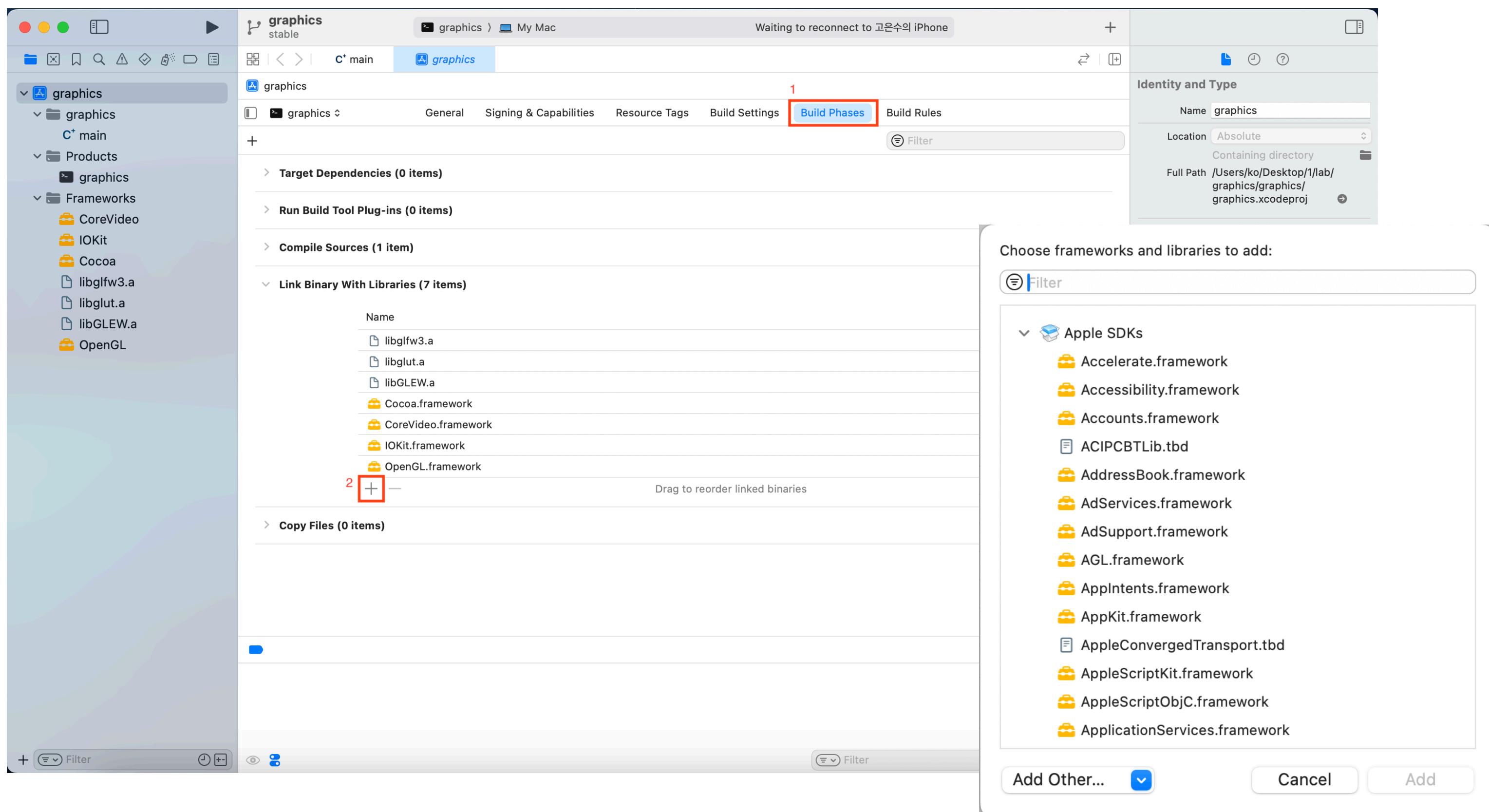
Project > build settings > header search paths에 추가

Apple silicon(m1,m2) : /opt/homebrew/include

Intel Mac : /usr/local/include

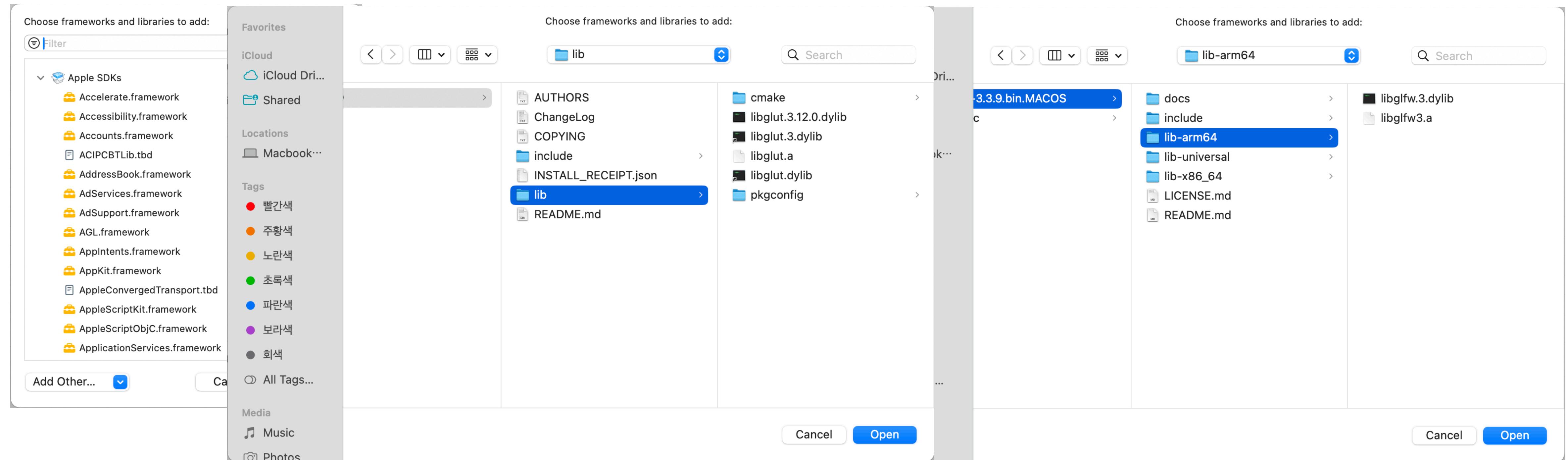
+ 설치한 glfw 폴더의 경로/include

# 라이브러리 추가



build phases > link binary with libraries 에 OpenGL, IOKit, CoreVideo, Cocoa 추가

# 라이브러리 추가

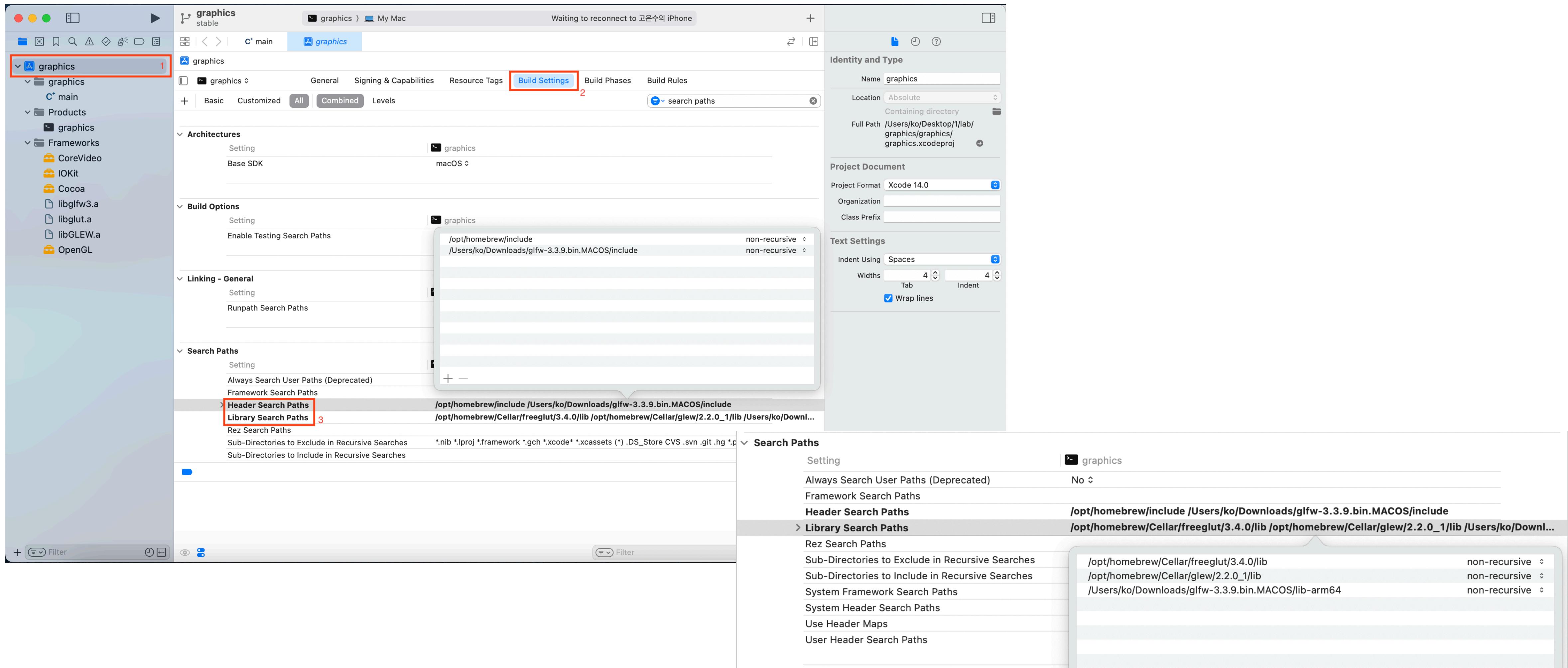


Add Other...에서 /opt/homebrew/Cellar/... 으로  
해당 라이브러리 폴더에 접근하여 .a 파일 선택 (freeglut, glew)

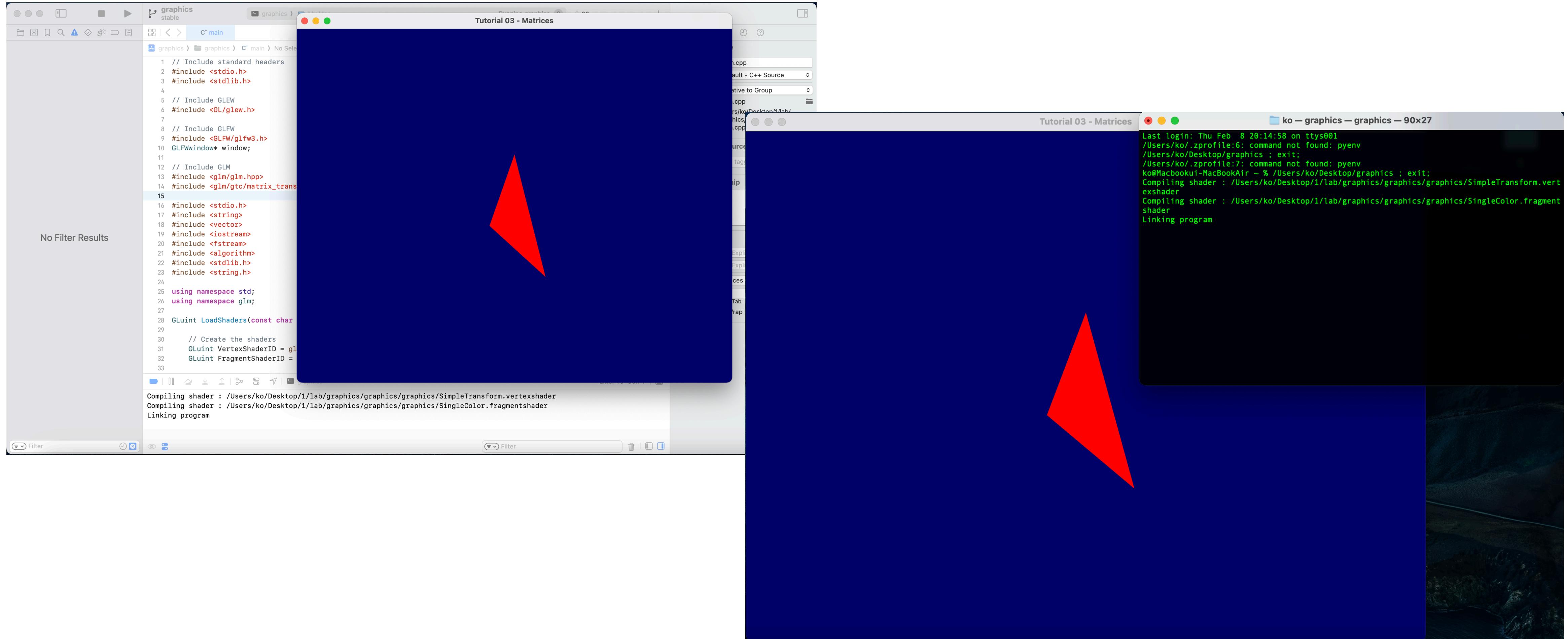
shift + cmd + . 으로 숨겨진 폴더 opt 접근 가능

glfw는 설치한 경로에서 본인 pc와 맞는것 선택

# Library search paths 추가



# 실행 결과



실행파일로 실행

감사합니다