VSCODE

C언어 개발 환경 구축하기

경성대학교 소프트웨어학과

최예진

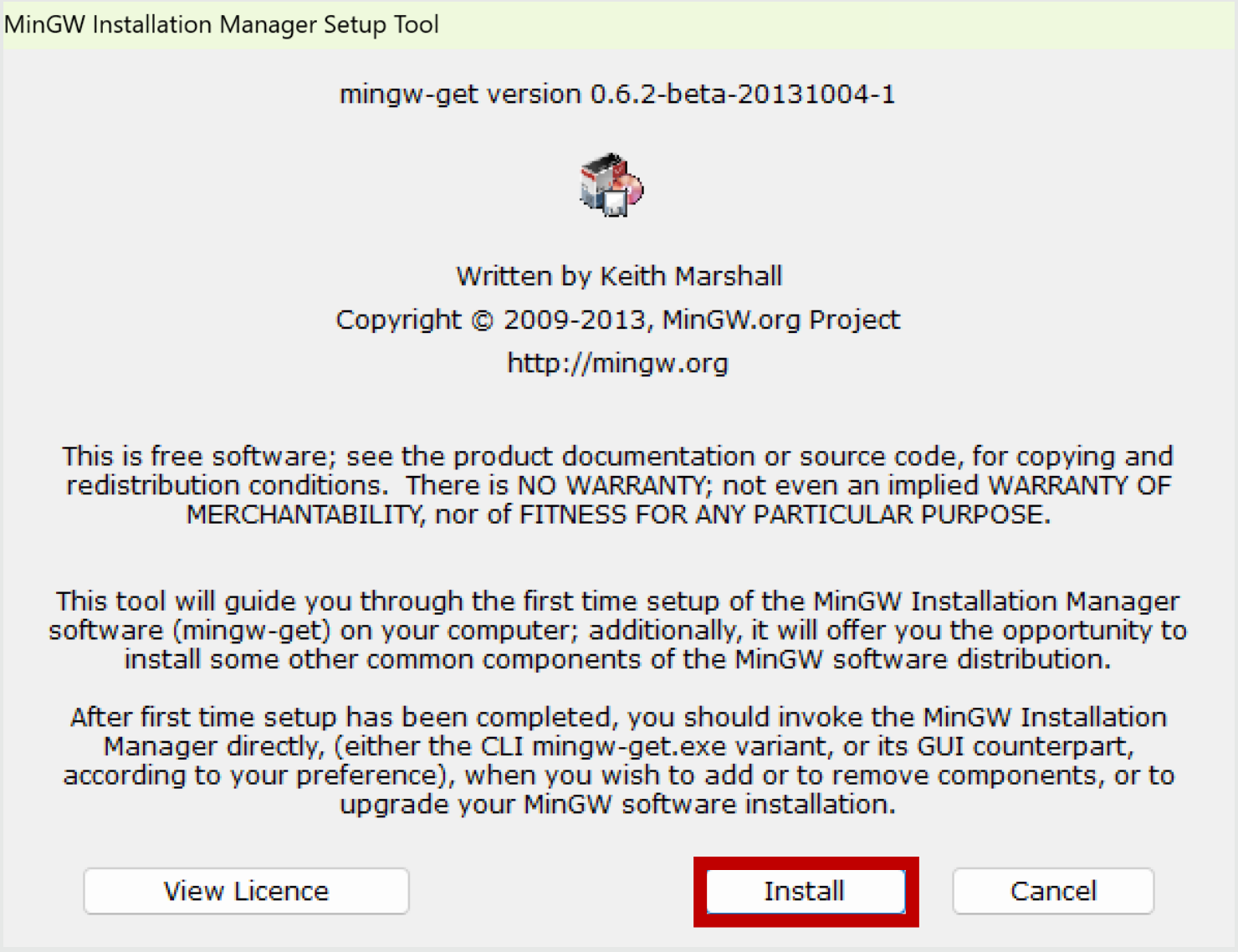
2024-08-12-월

확장프로그램에서 C/C++ 설치

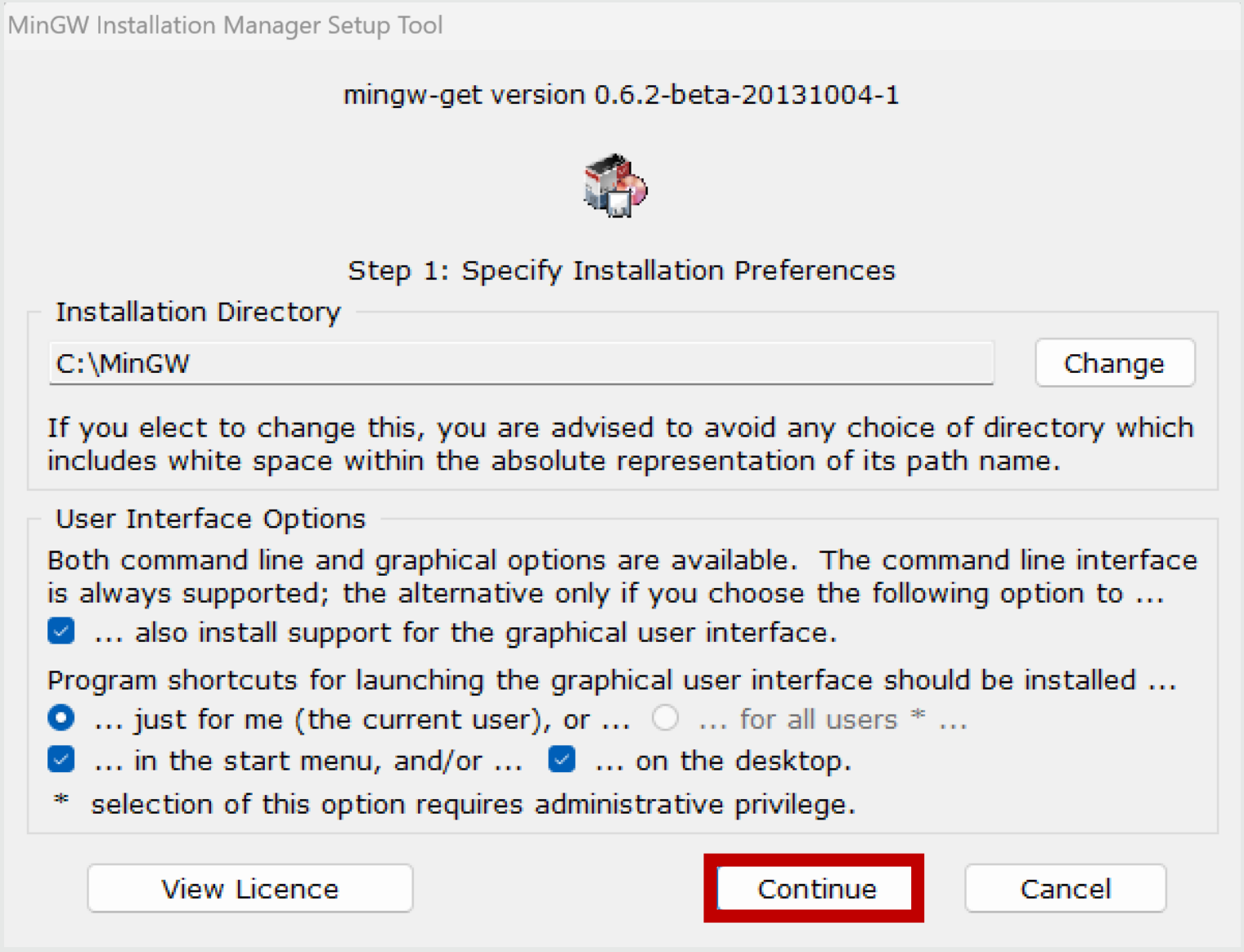
MinGW 설치

> VSCODE는 컴파일러 제공을 안 하기 때문에 MinGW를 설치해야 한다.
>
> https://sourceforge.net/projects/mingw/

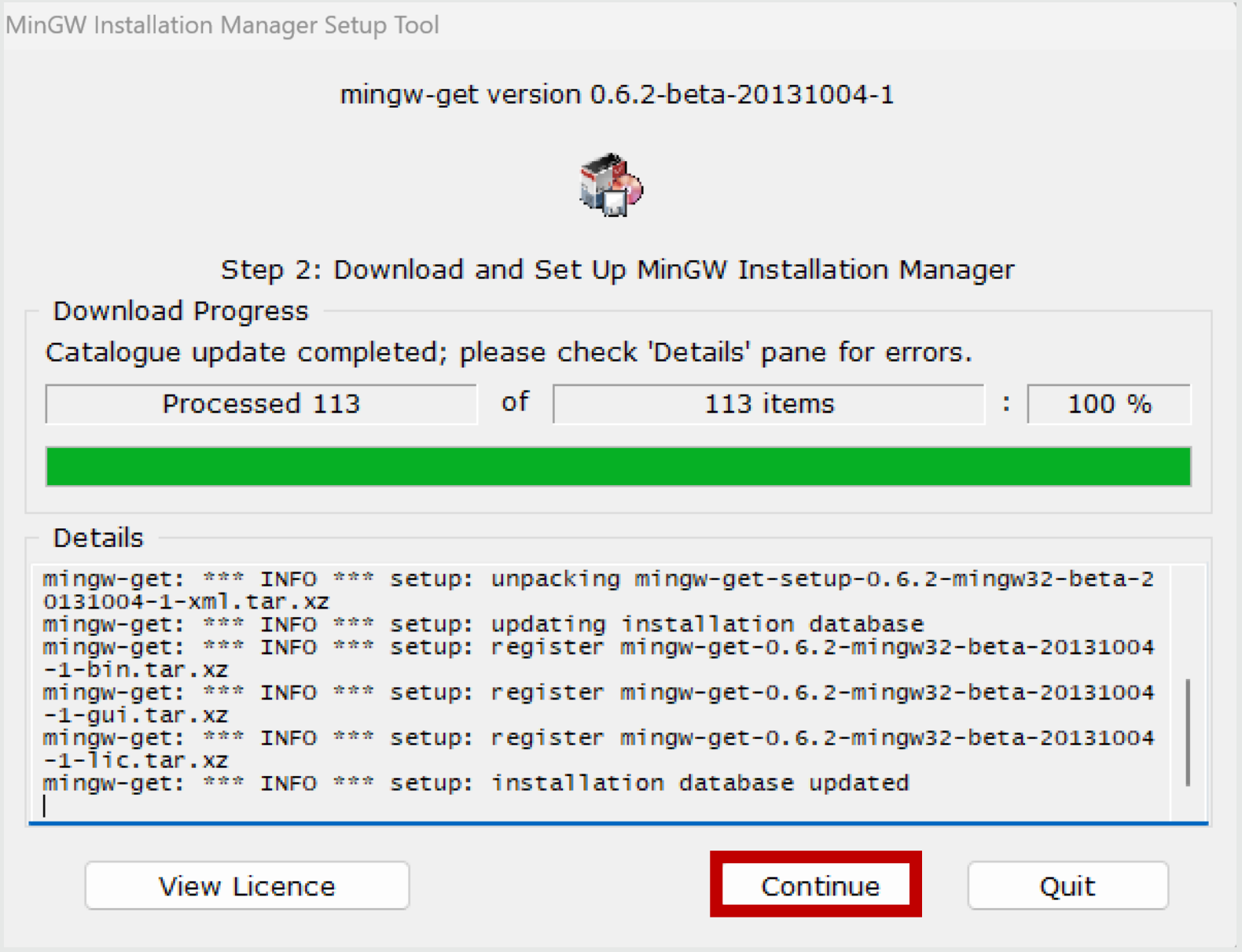
MinGW 설치


MinGW Installation Manager Setup Tool
mingw-get version 0.6.2-beta-20131004-1
Written by Keith Marshall
Copyright © 2009-2013, MinGW.org Project
http://mingw.org
This is free software; see the product documentation or source code, for copying and redistribution conditions. There is NO WARRANTY; not even an implied WARRANTY OF MERCHANTABILITY, nor of FITNESS FOR ANY PARTICULAR PURPOSE.
This tool will guide you through the first time setup of the MinGW Installation Manager software (mingw-get) on your computer; additionally, it will offer you the opportunity to install some other common components of the MinGW software distribution.
After first time setup has been completed, you should invoke the MinGW Installation Manager directly, (either the CLI mingw-get.exe variant, or its GUI counterpart, according to your preference), when you wish to add or to remove components, or to upgrade your MinGW software installation.
View Licence
Install
Cancel

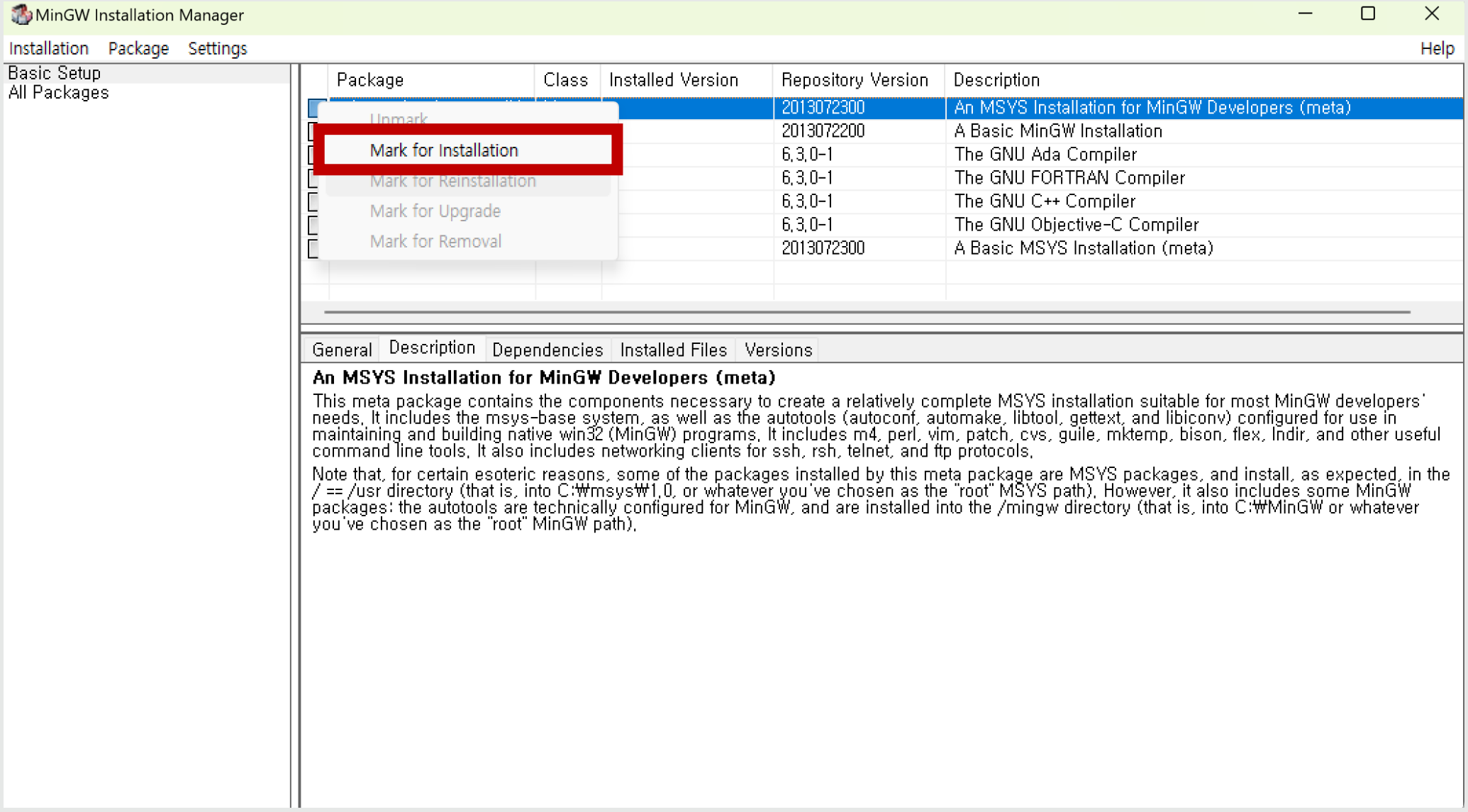
MinGW 설치


MinGW Installation Manager Setup Tool
mingw-get version 0.6.2-beta-20131004-1
Step 1: Specify Installation Preferences
Installation Directory
C:\MinGW
Change
If you elect to change this, you are advised to avoid any choice of directory which includes white space within the absolute representation of its path name.
User Interface Options
Both command line and graphical options are available. The command line interface is always supported; the alternative only if you choose the following option to ...
... also install support for the graphical user interface.
Program shortcuts for launching the graphical user interface should be installed ...
... just for me (the current user), or ...
... for all users * ...
... in the start menu, and/or ...
... on the desktop.
* selection of this option requires administrative privilege.
View Licence
Continue
Cancel

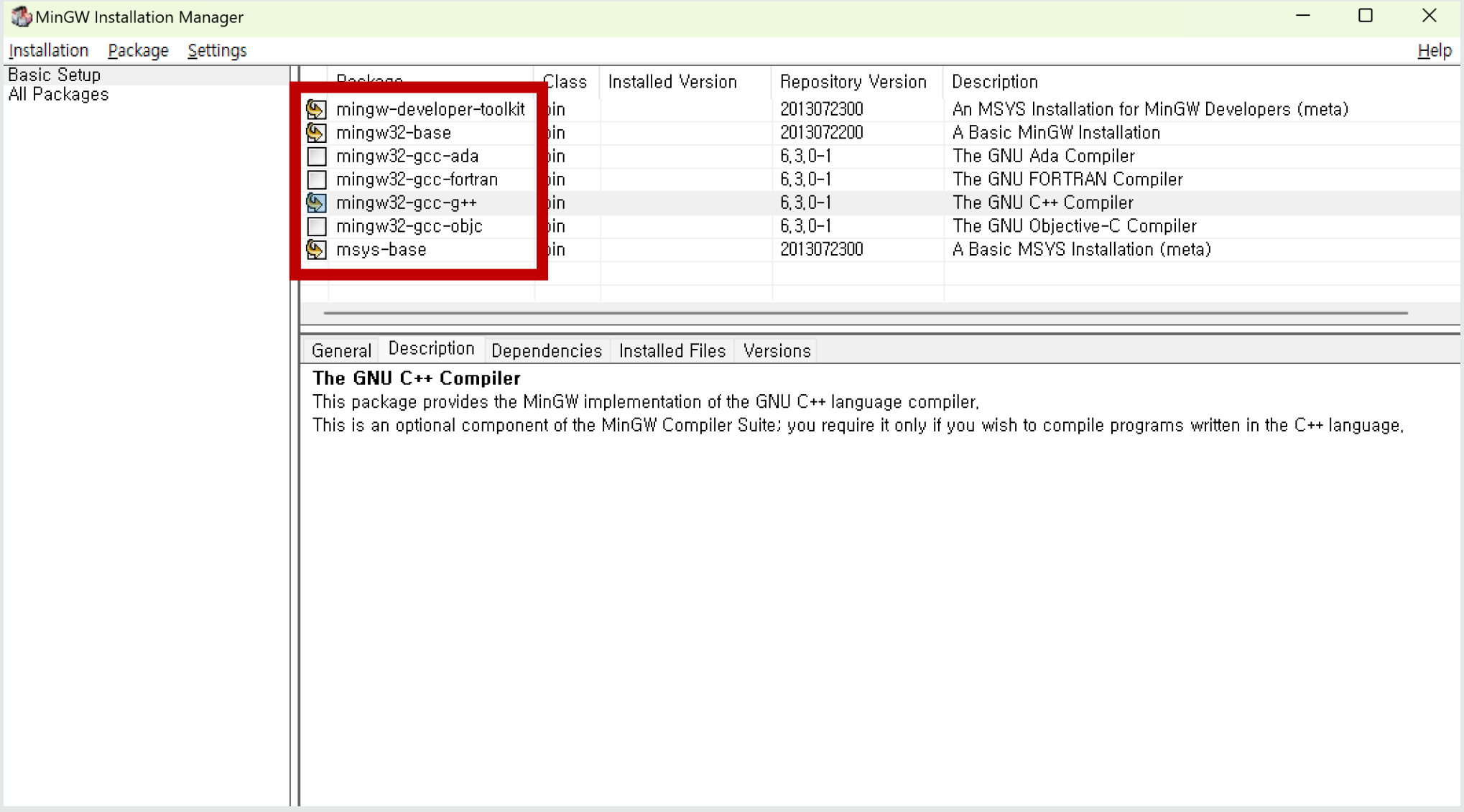
MinGW 설치


MinGW Installation Manager Setup Tool
mingw-get version 0.6.2-beta-20131004-1
Step 2: Download and Set Up MinGW Installation Manager
Download Progress
Catalogue update completed; please check 'Details' pane for errors.
Processed 113
of
113 items
:
100 %
Details
mingw-get: *** INFO *** setup: unpacking mingw-get-setup-0.6.2-mingw32-beta-20131004-1-xml.tar.xz
mingw-get: *** INFO *** setup: updating installation database
mingw-get: *** INFO *** setup: register mingw-get-0.6.2-mingw32-beta-20131004-1-bin.tar.xz
mingw-get: *** INFO *** setup: register mingw-get-0.6.2-mingw32-beta-20131004-1-gui.tar.xz
mingw-get: *** INFO *** setup: register mingw-get-0.6.2-mingw32-beta-20131004-1-lic.tar.xz
mingw-get: *** INFO *** setup: installation database updated
View Licence
Continue
Quit

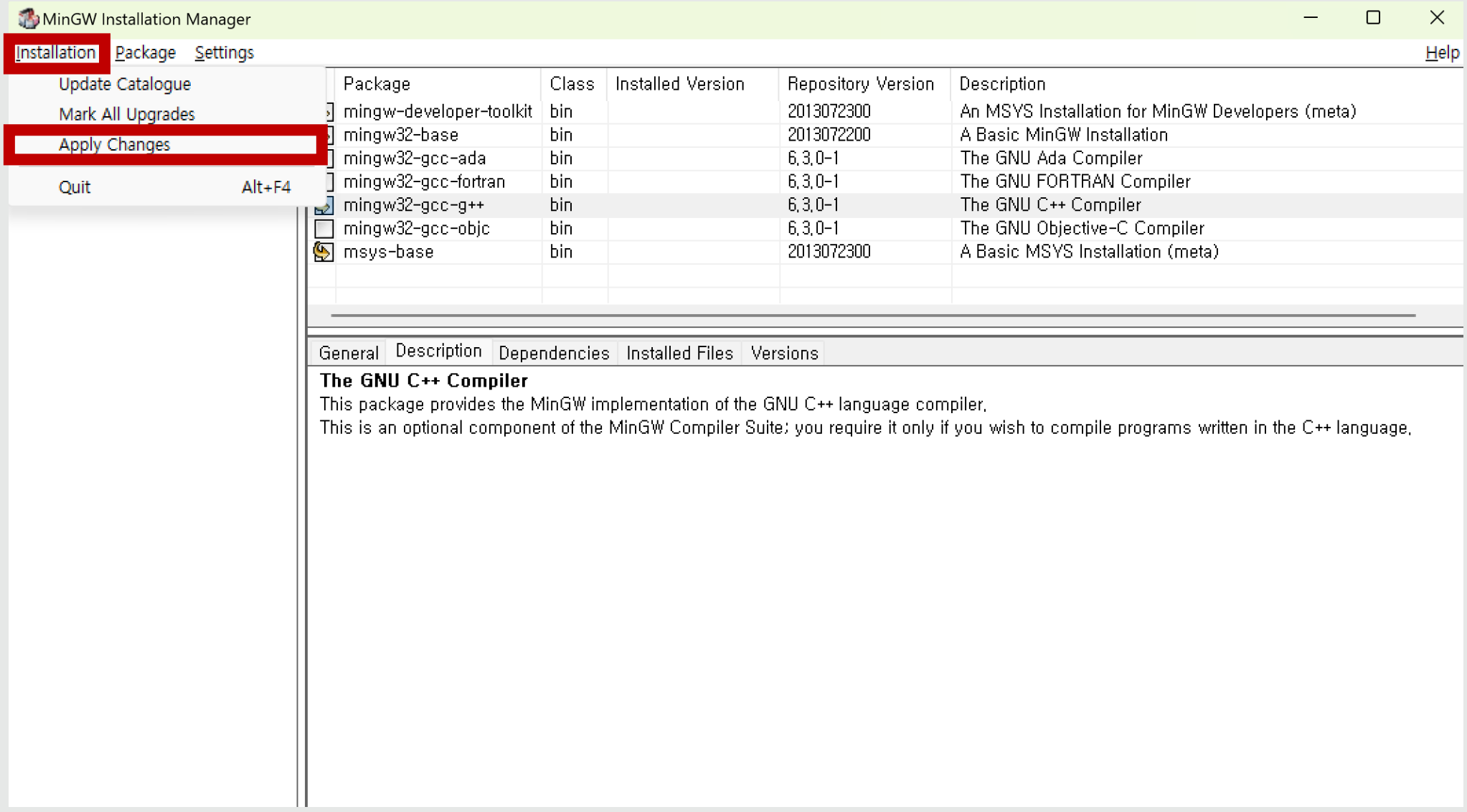
MinGW 설치


MinGW Installation Manager
Installation
Package
Settings
Help
Basic Setup
All Packages
Package
Class
Installed Version
Repository Version
Description
2013072300
An MSYS Installation for MinGW Developers (meta)
2013072200
A Basic MinGW Installation
6,3,0-1
The GNU Ada Compiler
6,3,0-1
The GNU FORTRAN Compiler
6,3,0-1
The GNU C++ Compiler
6,3,0-1
The GNU Objective-C Compiler
2013072300
A Basic MSYS Installation (meta)
Unmark
Mark for Installation
Mark for Reinstallation
Mark for Upgrade
Mark for Removal
General
Description
Dependencies
Installed Files
Versions
An MSYS Installation for MinGW Developers (meta)
This meta package contains the components necessary to create a relatively complete MSYS installation suitable for most MinGW developers' needs. It includes the msys-base system, as well as the autotools (autoconf, automake, libtool, gettext, and libiconv) configured for use in maintaining and building native win32 (MinGW) programs. It includes m4, perl, vim, patch, cvs, guile, mktemp, bison, flex, lndir, and other useful command line tools. It also includes networking clients for ssh, rsh, telnet, and ftp protocols.
Note that, for certain esoteric reasons, some of the packages installed by this meta package are MSYS packages, and install, as expected, in the / == /usr directory (that is, into C:₩msys₩1.0, or whatever you've chosen as the "root" MSYS path). However, it also includes some MinGW packages: the autotools are technically configured for MinGW, and are installed into the /mingw directory (that is, into C:₩MinGW or whatever you've chosen as the "root" MinGW path).

MinGW 설치


MinGW Installation Manager
Installation
Package
Settings
Help
Basic Setup
All Packages
Package
Class
Installed Version
Repository Version
Description
mingw-developer-toolkit
2013072300
An MSYS Installation for MinGW Developers (meta)
mingw32-base
2013072200
A Basic MinGW Installation
mingw32-gcc-ada
6.3.0-1
The GNU Ada Compiler
mingw32-gcc-fortran
6.3.0-1
The GNU FORTRAN Compiler
mingw32-gcc-g++
6.3.0-1
The GNU C++ Compiler
mingw32-gcc-objc
6.3.0-1
The GNU Objective-C Compiler
msys-base
2013072300
A Basic MSYS Installation (meta)
General
Description
Dependencies
Installed Files
Versions
The GNU C++ Compiler
This package provides the MinGW implementation of the GNU C++ language compiler.
This is an optional component of the MinGW Compiler Suite; you require it only if you wish to compile programs written in the C++ language.

MinGW 설치


MinGW Installation Manager
Installation
Package
Settings
Help
Update Catalogue
Mark All Upgrades
Apply Changes
Quit
Alt+F4
Package
Class
Installed Version
Repository Version
Description
mingw-developer-toolkit
bin
2013072300
An MSYS Installation for MinGW Developers (meta)
mingw32-base
bin
2013072200
A Basic MinGW Installation
mingw32-gcc-ada
bin
6.3.0-1
The GNU Ada Compiler
mingw32-gcc-fortran
bin
6.3.0-1
The GNU FORTRAN Compiler
mingw32-gcc-g++
bin
6.3.0-1
The GNU C++ Compiler
mingw32-gcc-objc
bin
6.3.0-1
The GNU Objective-C Compiler
msys-base
bin
2013072300
A Basic MSYS Installation (meta)
General
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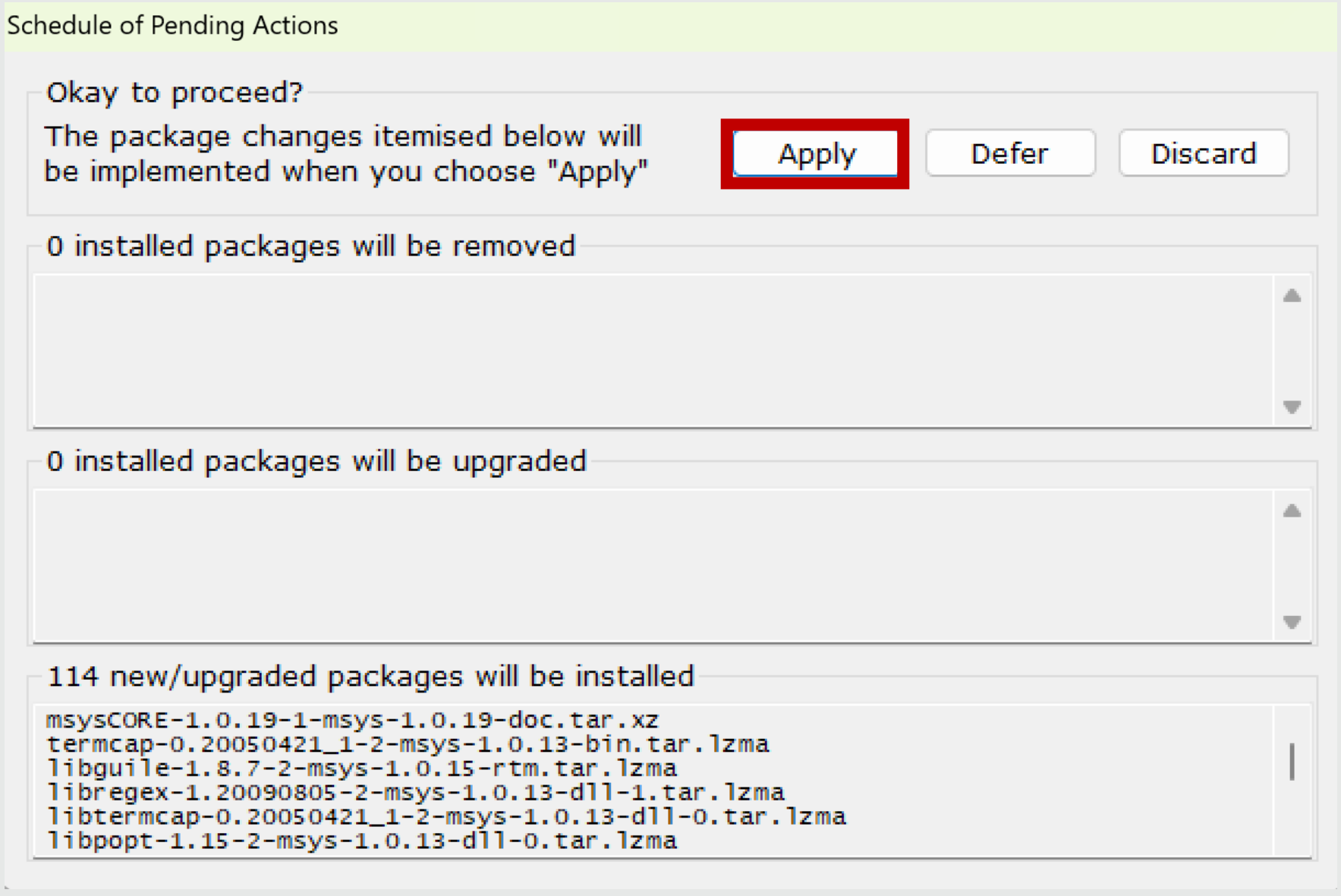
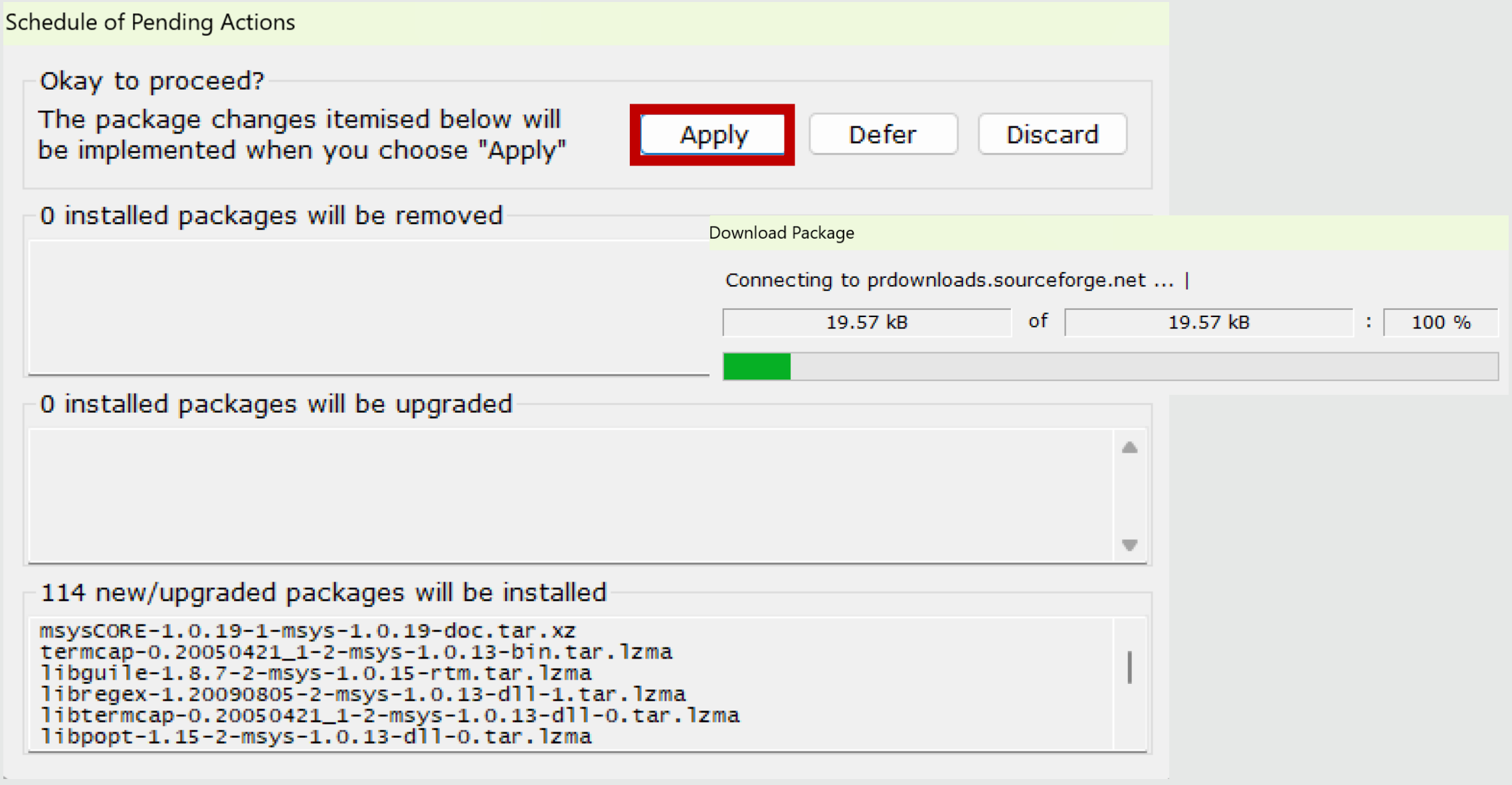
MinGW 설치

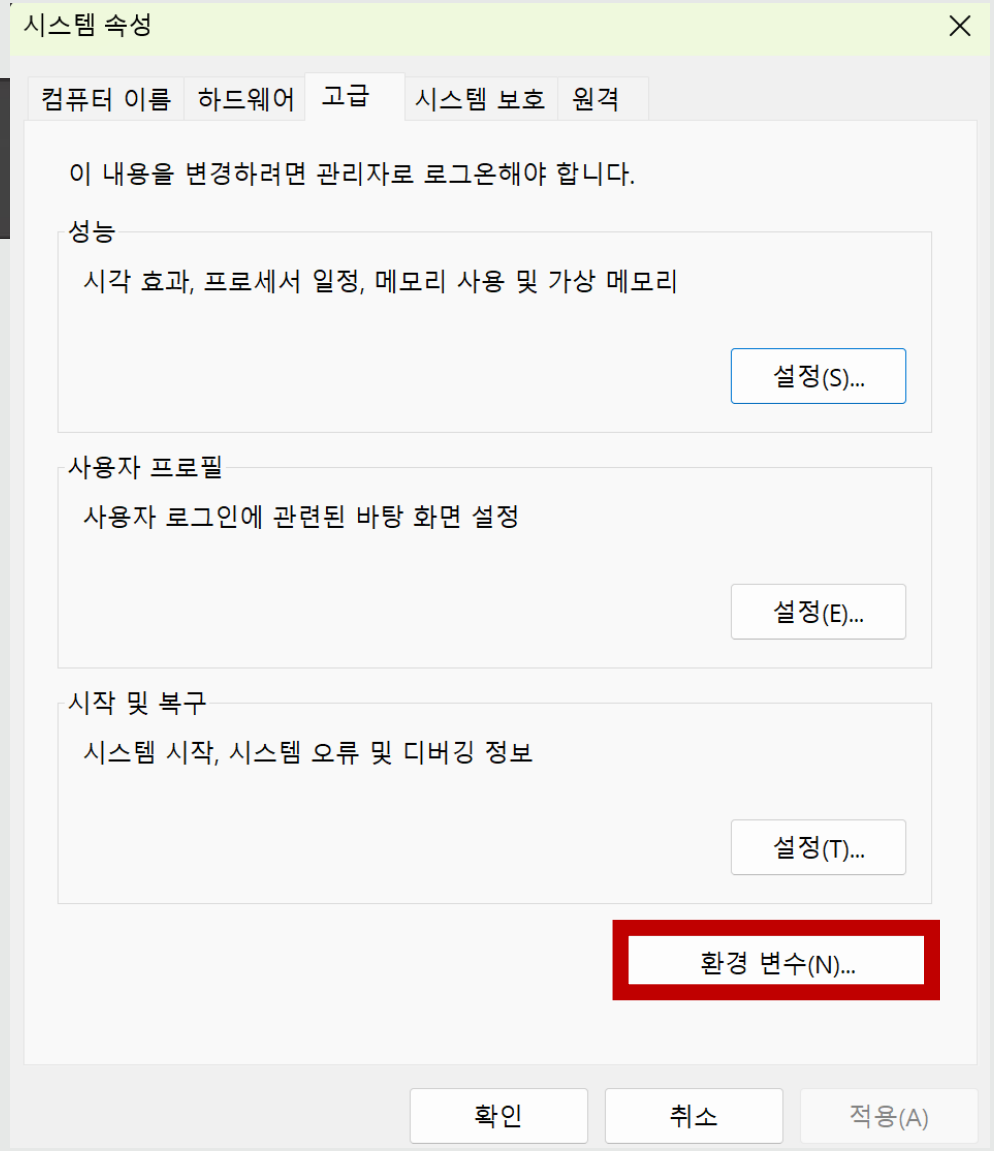

Schedule of Pending Actions
Okay to proceed?
The package changes itemised below will be implemented when you choose "Apply"
Apply
Defer
Discard
0 installed packages will be removed
0 installed packages will be upgraded
114 new/upgraded packages will be installed
msysCORE-1.0.19-1-msys-1.0.19-doc.tar.xz
termcap-0.20050421_1-2-msys-1.0.13-bin.tar.lzma
libguile-1.8.7-2-msys-1.0.15-rtm.tar.lzma
libregex-1.20090805-2-msys-1.0.13-dll-1.tar.lzma
libtermcap-0.20050421_1-2-msys-1.0.13-dll-0.tar.lzma
libpopt-1.15-2-msys-1.0.13-dll-0.tar.lzma

MinGW 설치

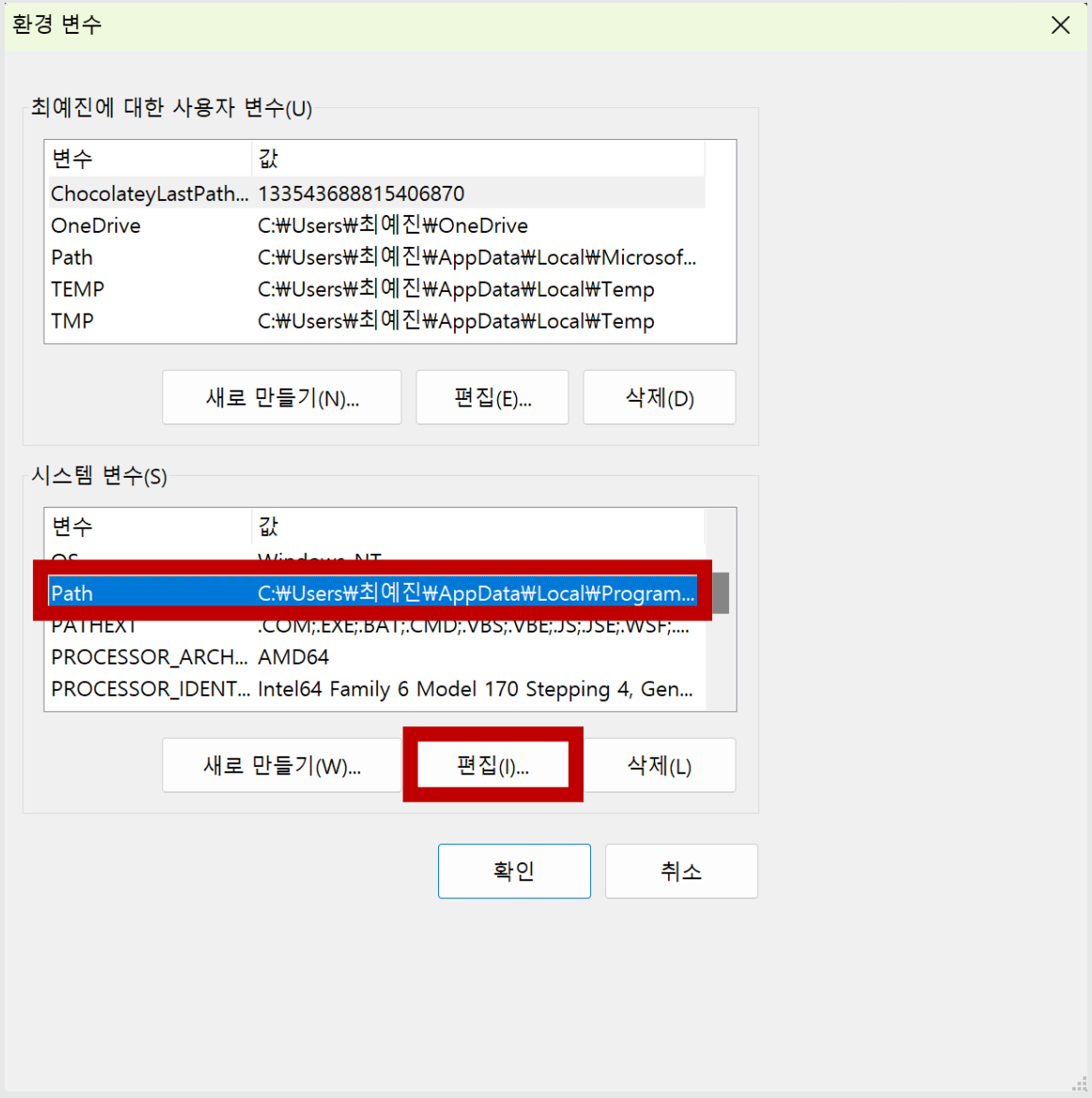

Schedule of Pending Actions
Okay to proceed?
The package changes itemised below will be implemented when you choose "Apply"
Apply
Defer
Discard
0 installed packages will be removed
Download Package
Connecting to prdownloads.sourceforge.net ... |
19.57 kB
of
19.57 kB
:
100 %
0 installed packages will be upgraded
114 new/upgraded packages will be installed
msysCORE-1.0.19-1-msys-1.0.19-doc.tar.xz
termcap-0.20050421_1-2-msys-1.0.13-bin.tar.lzma
libguile-1.8.7-2-msys-1.0.15-rtm.tar.lzma
libregex-1.20090805-2-msys-1.0.13-dll-1.tar.lzma
libtermcap-0.20050421_1-2-msys-1.0.13-dll-0.tar.lzma
libpopt-1.15-2-msys-1.0.13-dll-0.tar.lzma

환경 변수 설정하기

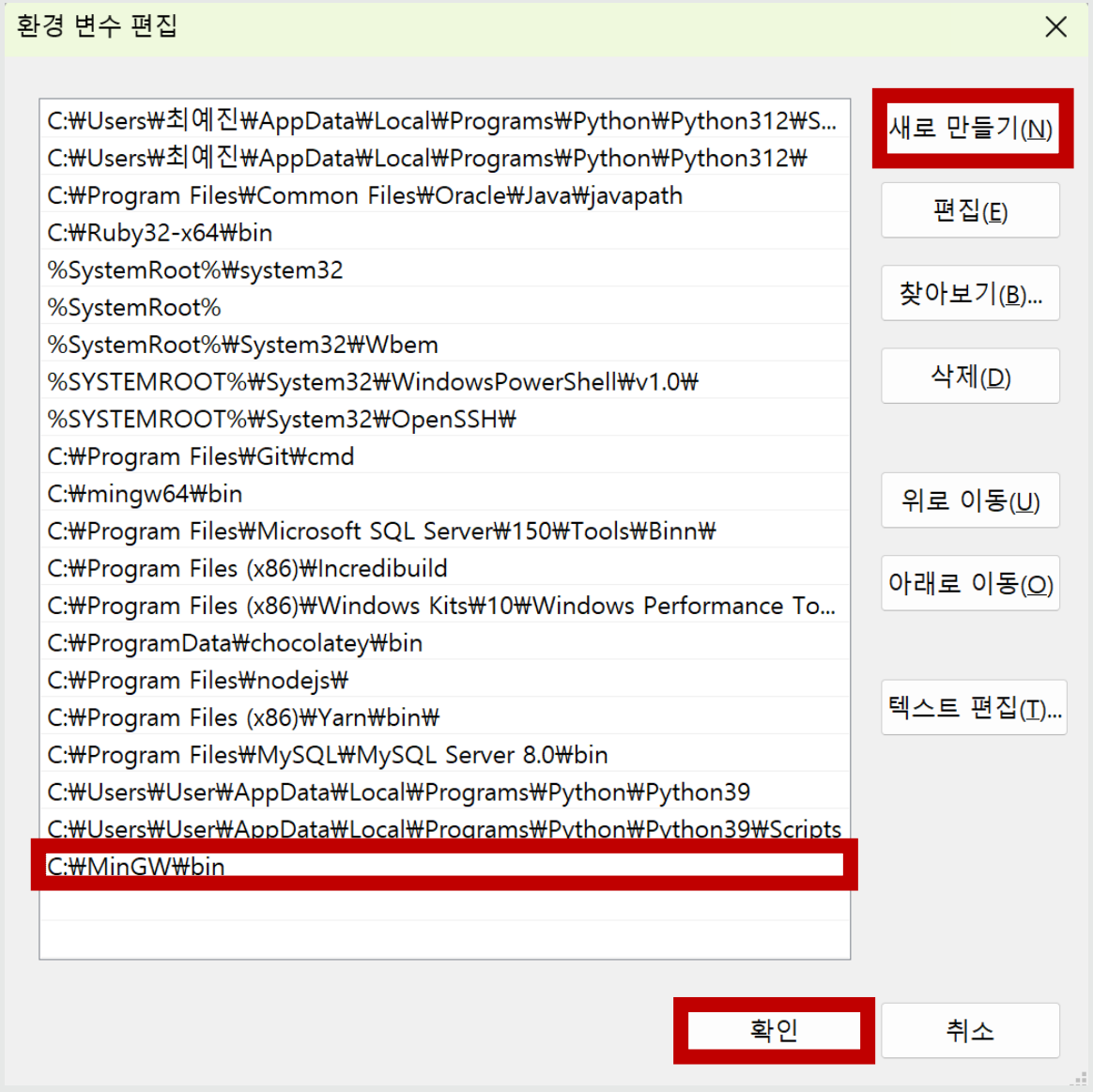

고급 시스템 설정 보기
제어판


시스템 속성
컴퓨터 이름
하드웨어
고급
시스템 보호
원격
이 내용을 변경하려면 관리자로 로그온해야 합니다.
성능
시각 효과, 프로세서 일정, 메모리 사용 및 가상 메모리
설정(S)...
사용자 프로필
사용자 로그인에 관련된 바탕 화면 설정
설정(E)...
시작 및 복구
시스템 시작, 시스템 오류 및 디버깅 정보
설정(T)...
환경 변수(N)...
확인
취소
적용(A)

환경 변수 설정하기

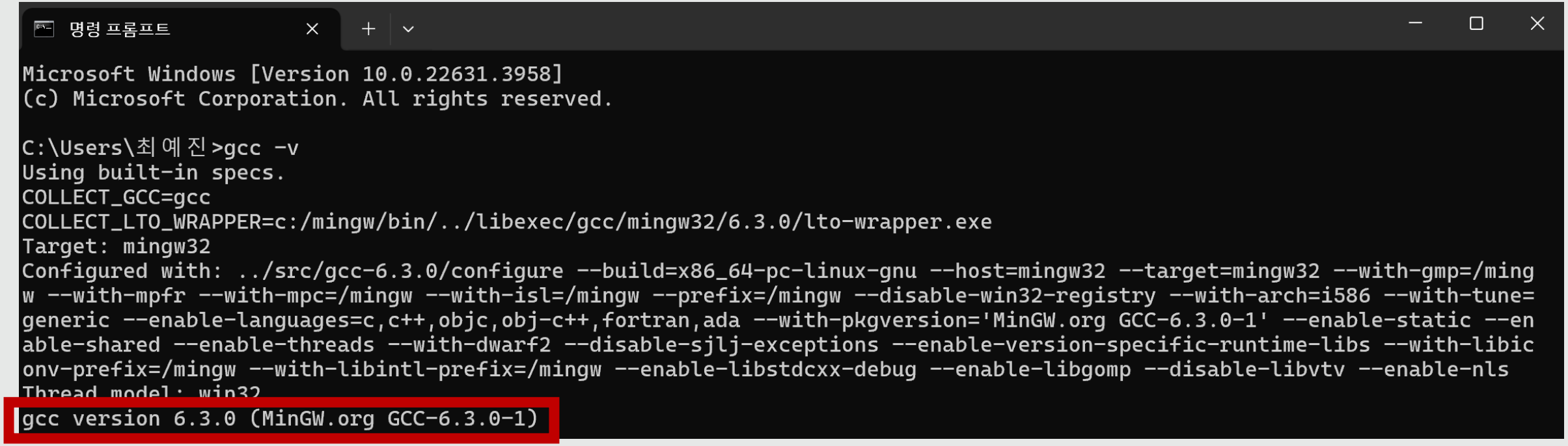

환경 변수
최예진에 대한 사용자 변수(U)
변수
값
ChocolateyLastPath...
133543688815406870
OneDrive
C:₩Users₩최예진₩OneDrive
Path
C:₩Users₩최예진₩AppData₩Local₩Microsof...
TEMP
C:₩Users₩최예진₩AppData₩Local₩Temp
TMP
C:₩Users₩최예진₩AppData₩Local₩Temp
새로 만들기(N)...
편집(E)...
삭제(D)
시스템 변수(S)
변수
값
Path
C:₩Users₩최예진₩AppData₩Local₩Program...
PROCESSOR_ARCH...
AMD64
PROCESSOR_IDENT...
Intel64 Family 6 Model 170 Stepping 4, Gen...
새로 만들기(W)...
편집(I)...
삭제(L)
확인
취소

환경 변수 설정하기



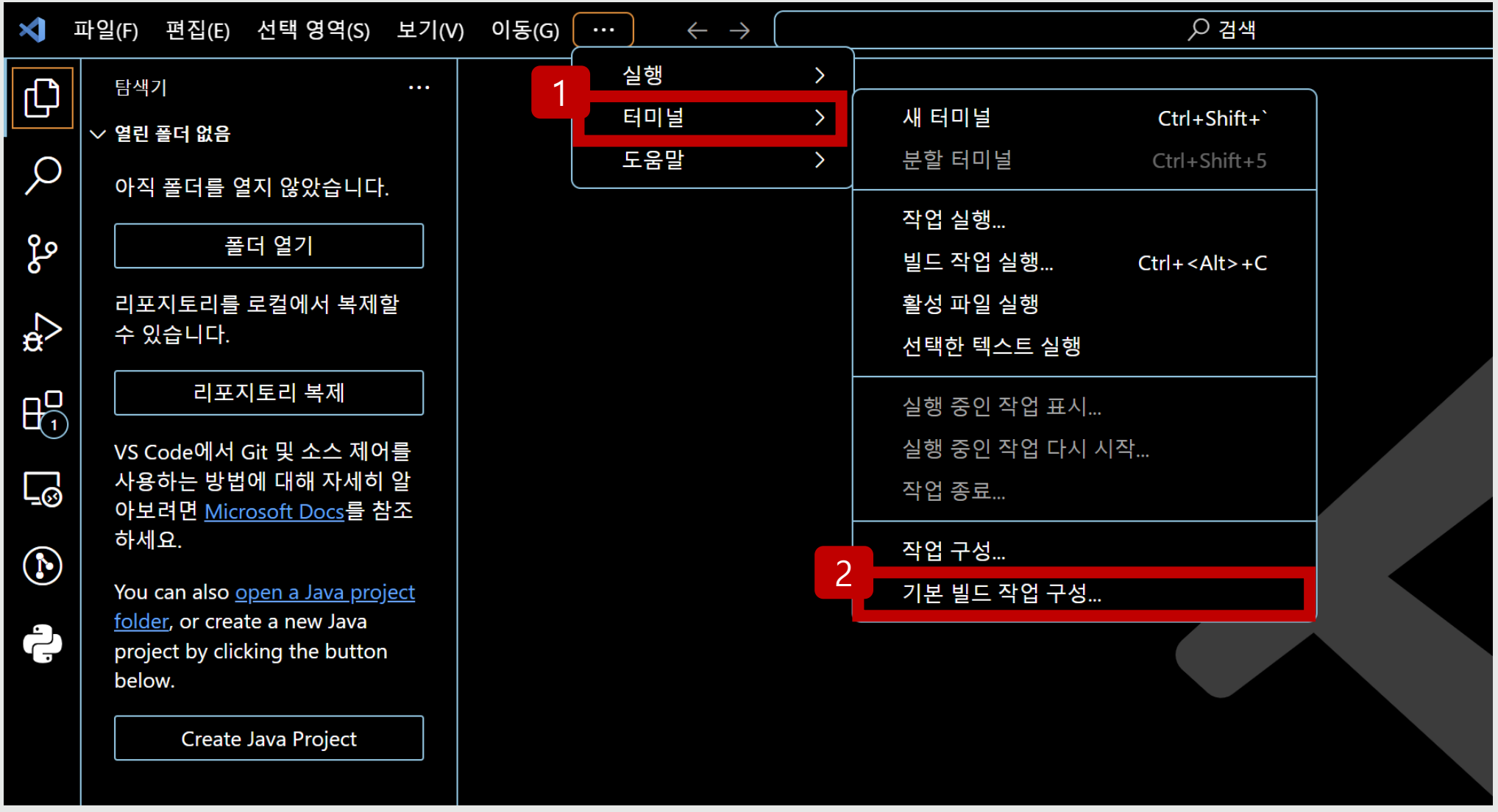
새로 만들기 - C:₩MinGW₩bin - 확인

gcc 버전 확인

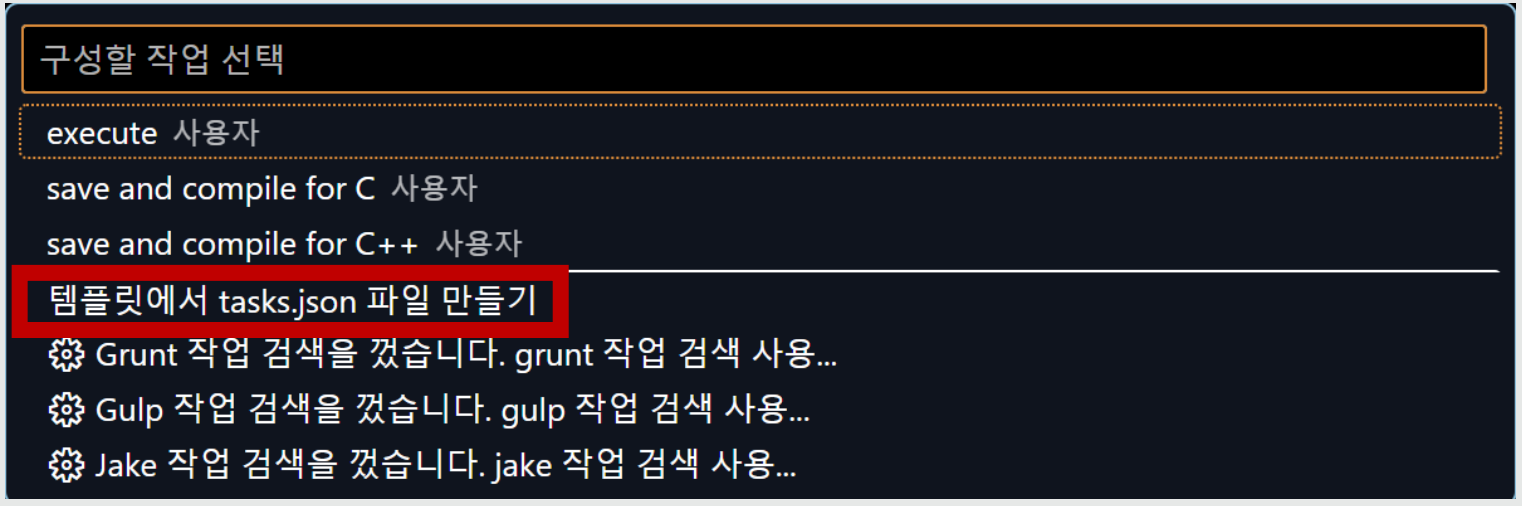


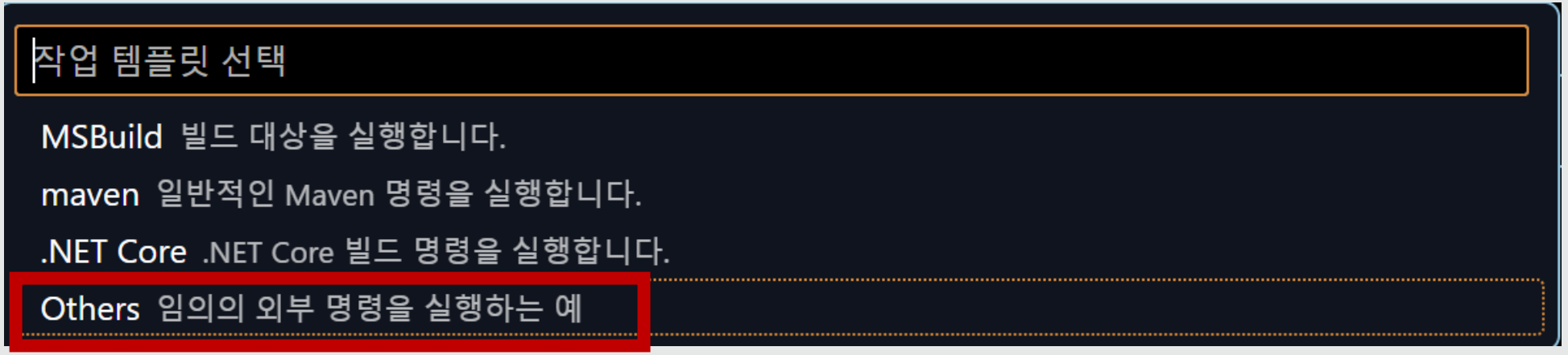
> cmd – gcc -v

tasks.json 파일 작성

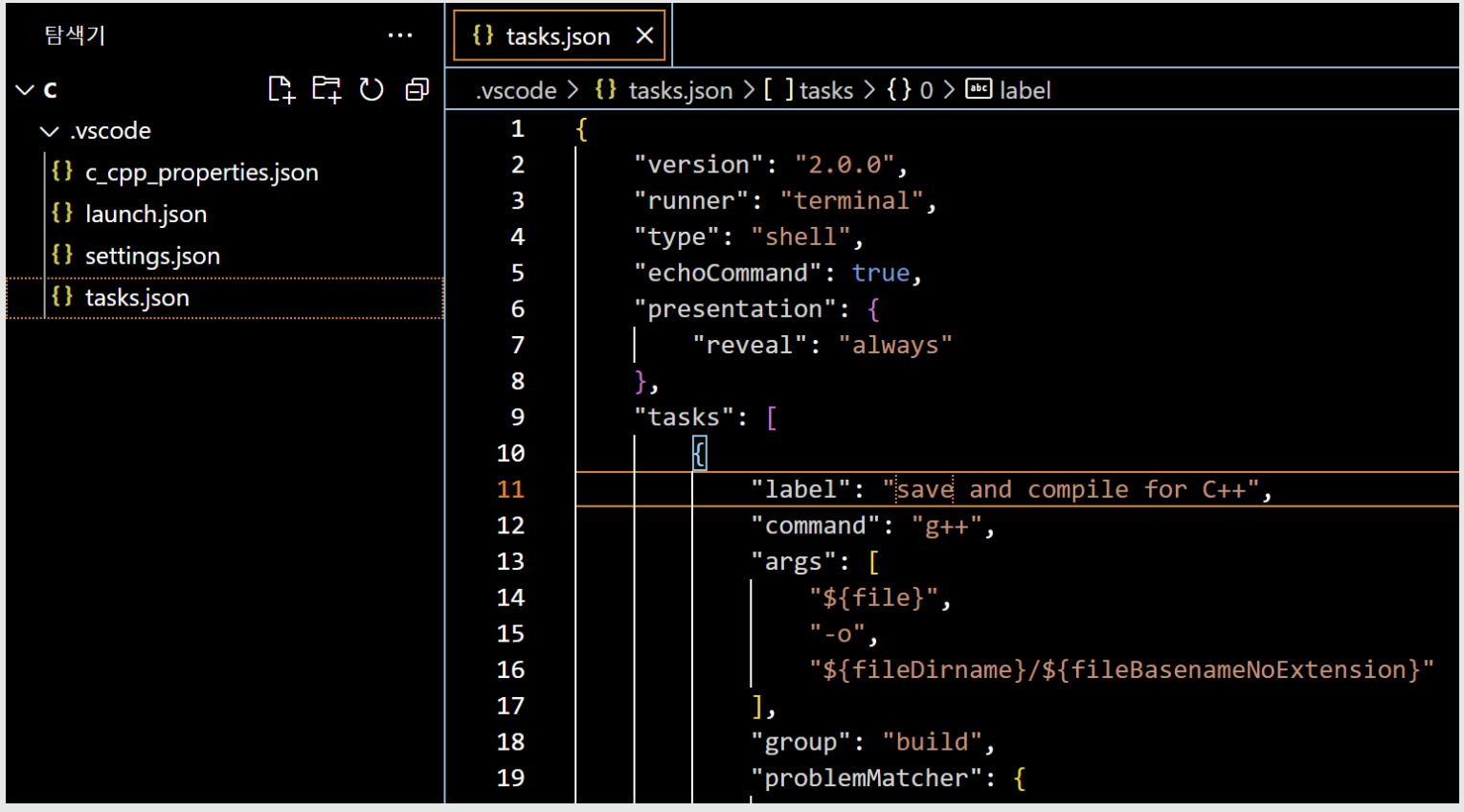


tasks.json 파일 작성



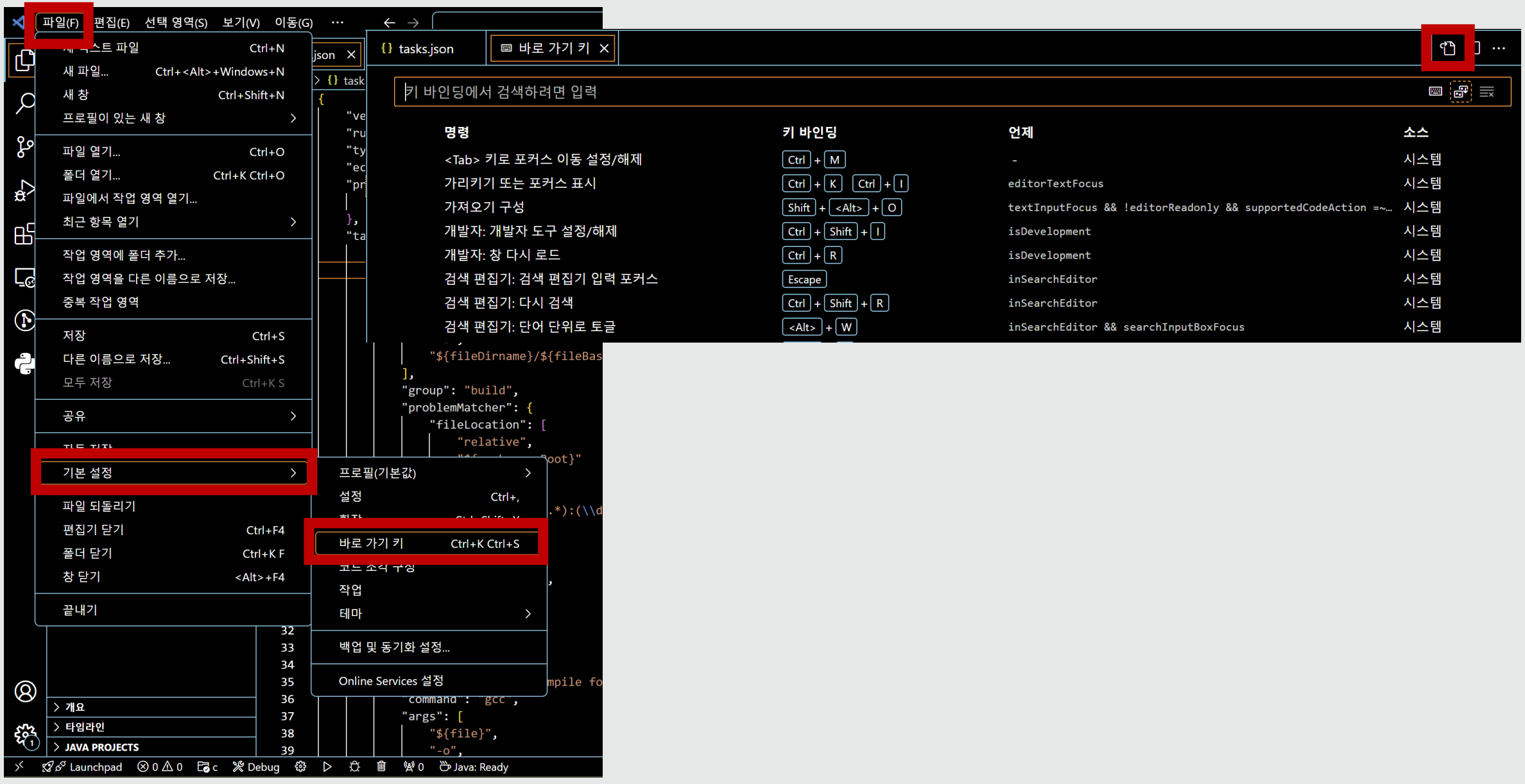


tasks.json 파일 작성

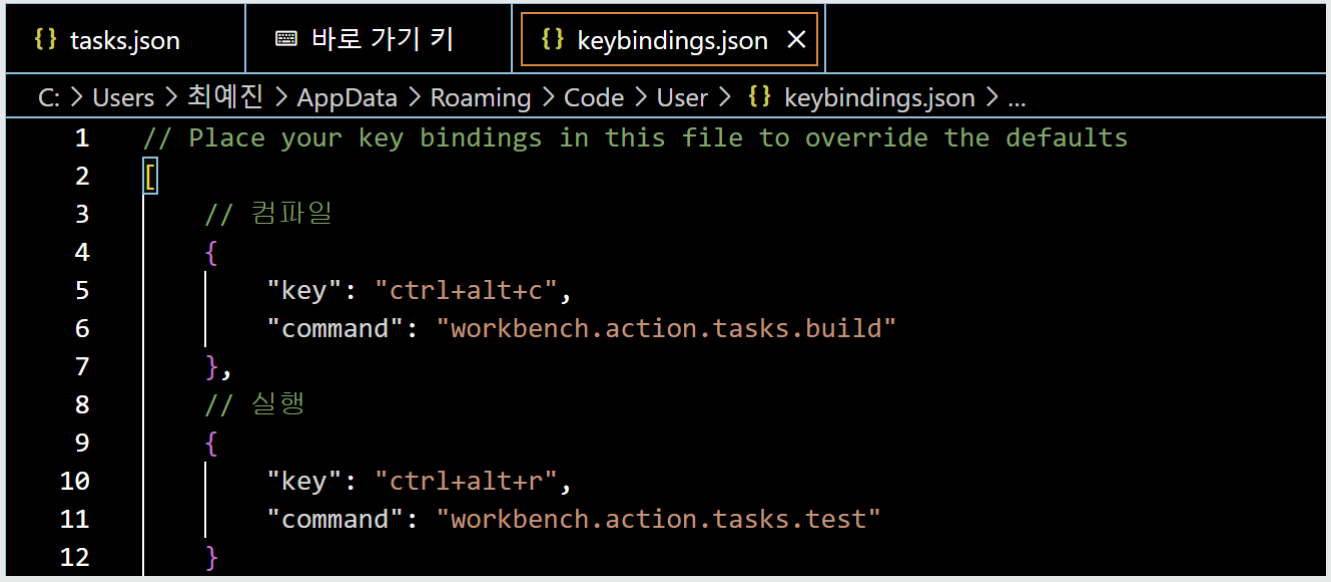


tasks.txt 파일 복사/붙여넣기

단축키 설정


파일(F)
편집(E)
선택 영역(S)
보기(V)
이동(G)
새 파일... Ctrl+N
새 파일... Ctrl+<Alt>+Windows+N
새 창 Ctrl+Shift+N
프로필이 있는 새 창
파일 열기... Ctrl+O
폴더 열기... Ctrl+K Ctrl+O
파일에서 작업 영역 열기...
최근 항목 열기
작업 영역에 폴더 추가...
작업 영역을 다른 이름으로 저장...
중복 작업 영역
저장 Ctrl+S
다른 이름으로 저장... Ctrl+Shift+S
모두 저장 Ctrl+K S
공유
기본 설정
파일 되돌리기
편집기 닫기 Ctrl+F4
폴더 닫기 Ctrl+K F
창 닫기 <Alt>+F4
끝내기
프로필(기본값)
설정 Ctrl+,
바로 가기 키 Ctrl+K Ctrl+S
작업
테마
백업 및 동기화 설정...
Online Services 설정
tasks.json
바로 가기 키
키 바인딩에서 검색하려면 입력
명령
키 바인딩
언제
소스
<Tab> 키로 포커스 이동 설정/해제 Ctrl + M - 시스템
가리키기 또는 포커스 표시 Ctrl + K Ctrl + I editorTextFocus 시스템
가져오기 구성 Shift + <Alt> + O textInputFocus && !editorReadonly && supportedCodeAction =~… 시스템
개발자: 개발자 도구 설정/해제 Ctrl + Shift + I isDevelopment 시스템
개발자: 창 다시 로드 Ctrl + R isDevelopment 시스템
검색 편집기: 검색 편집기 입력 포커스 Escape inSearchEditor 시스템
검색 편집기: 다시 검색 Ctrl + Shift + R inSearchEditor 시스템
검색 편집기: 단어 단위로 토글 <Alt> + W inSearchEditor && searchInputBoxFocus 시스템
"${fileDirname}/${fileBas
],
"group": "build",
"problemMatcher": {
"fileLocation": [
"relative",
"command": "gcc",
"args": [
"${file}",
"-o",
개요
타임라인
JAVA PROJECTS
Launchpad
Debug
Java: Ready

단축키 설정



key.txt 파일 복사/붙여넣기

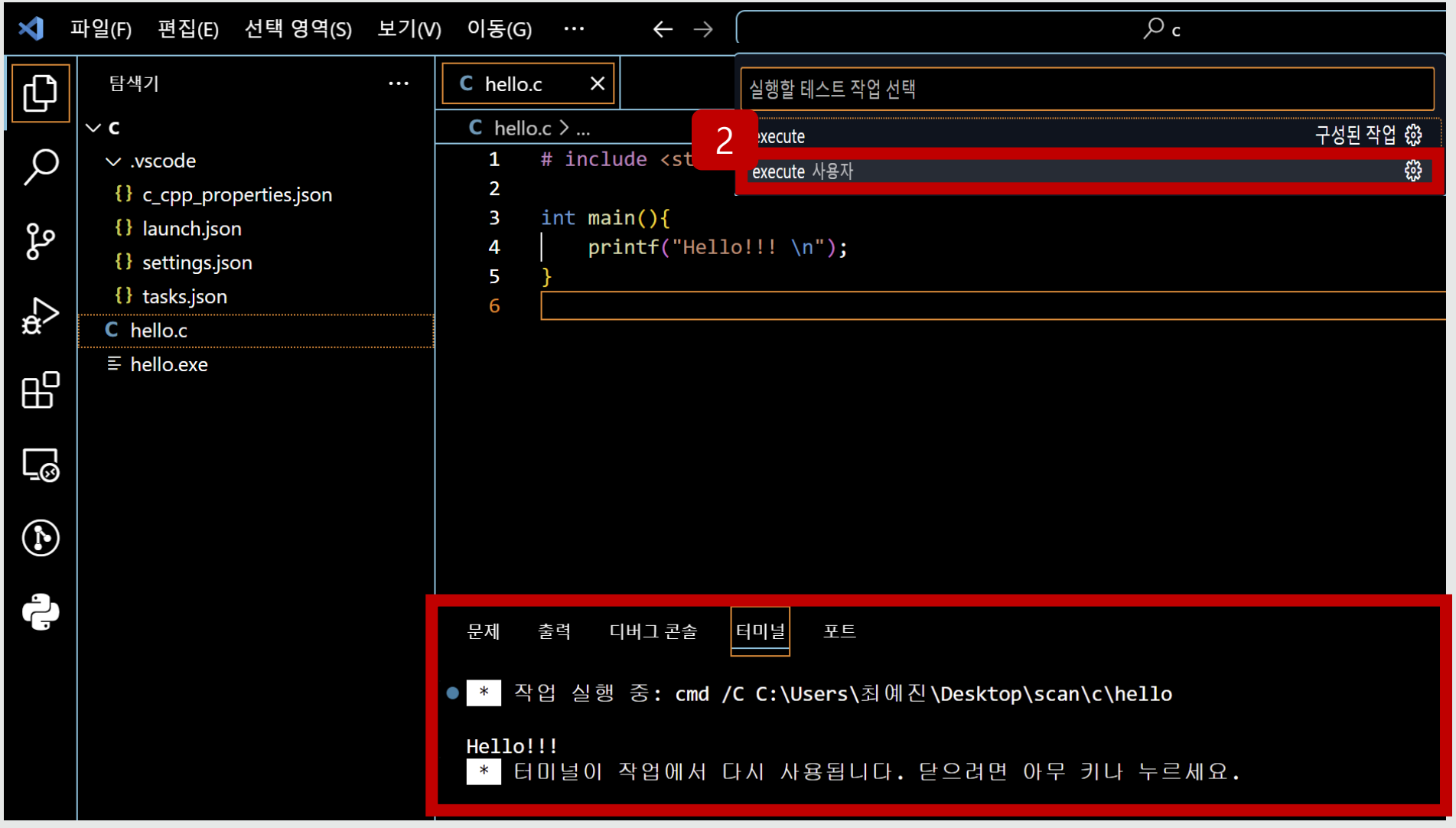
```
// Place your key bindings in this file to override the defaults
[
    // 컴파일
    {
        "key": "ctrl+alt+c",
        "command": "workbench.action.tasks.build"
    },
    // 실행
    {
        "key": "ctrl+alt+r",
        "command": "workbench.action.tasks.test"
    }
]
```

코드 작성 후 실행 파일 생성

1 Ctrl + Alt + C

코드 작성 후 실행 파일 생성

1 Ctrl + Alt + r



Reference

https://nanglam.tistory.com/4

감사

합니다