

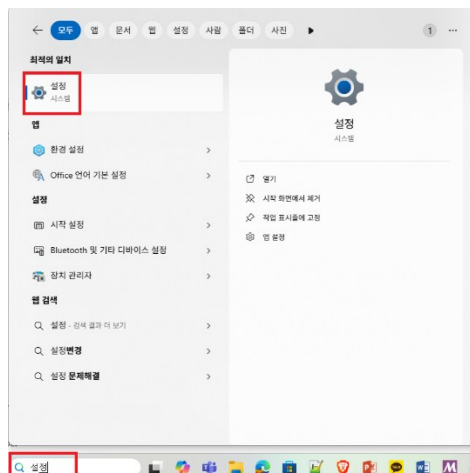
컴파일러 설치

1. MSYS2 다운로드: https://github.com/msys2/msys2-installer/releases/download/2024-12-08/msys2-x86_64-20241208.exe
2. MSYS2 설치
3. MSYS2 MSYS 실행하여, 다음 명령을 통해 MinGW-w64 설치

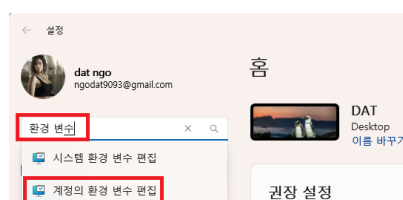
pacman -S --needed base-devel mingw-w64-ucrt-x86_64-toolchain

```
USER@DAT MSYS ~  
$ pacman -S --needed base-devel mingw-w64-ucrt-x86_64-toolchain  
:: There are 13 members in group mingw-w64-ucrt-x86_64-toolchain:  
:: Repository ucrt64  
1) mingw-w64-ucrt-x86_64-binutils 2) mingw-w64-ucrt-x86_64-crt-git  
3) mingw-w64-ucrt-x86_64-gcc 4) mingw-w64-ucrt-x86_64-gdb  
5) mingw-w64-ucrt-x86_64-gdb-multiarch 6) mingw-w64-ucrt-x86_64-headers-git  
7) mingw-w64-ucrt-x86_64-libmangle-git 8) mingw-w64-ucrt-x86_64-libwinpthread-git  
9) mingw-w64-ucrt-x86_64-make 10) mingw-w64-ucrt-x86_64-pkgconf  
11) mingw-w64-ucrt-x86_64-tools-git 12) mingw-w64-ucrt-x86_64-winthreads-git  
13) mingw-w64-ucrt-x86_64-winstorecompat-git  
Enter a selection (default=all): |
```

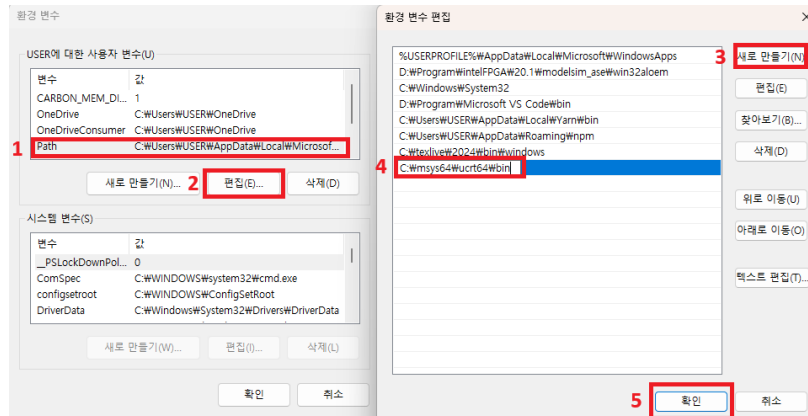
4. Enter → Y
5. 설치 끝난 후 MinGW-w64의 bin 폴더를 Windows의 PATH에 추가
A. Windows의 검색장에서 “설정” 검색 → 설정



- B. 설정검색에서 “환경 변수” 검색 → 계정의 환경 변수 편집



C. Path 선택 → 편집 → 새로 만들기 → "C:\wmsys64\wucrt64\wbin" 추가 → 확인



6. 설치를 검증하기 위해 "명령 프롬프트"에서 다음과 같은 명령을 실행

```
gcc --version
g++ --version
gdb --version
```

```
Microsoft Windows [Version 10.0.26100.4349]
(c) Microsoft Corporation. All rights reserved.

C:\Users\USER>gcc --version
gcc (Rev2, Built by MSYS2 project) 14.2.0
Copyright (C) 2024 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

C:\Users\USER>g++ --version
g++ (Rev2, Built by MSYS2 project) 14.2.0
Copyright (C) 2024 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

C:\Users\USER>gdb --version
GNU gdb (GDB) 15.2
Copyright (C) 2024 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

C:\Users\USER>
```

7. C 프로그래밍의 첫 프로그램

A. 다음과 같은 helloworld.c 파일을 생성

```
#include <stdio.h>

int main() {
    printf("Hello World!");
    return 0;
}
```

B. 명령 프롬프트에서 helloworld.c 파일의 위치로 이동

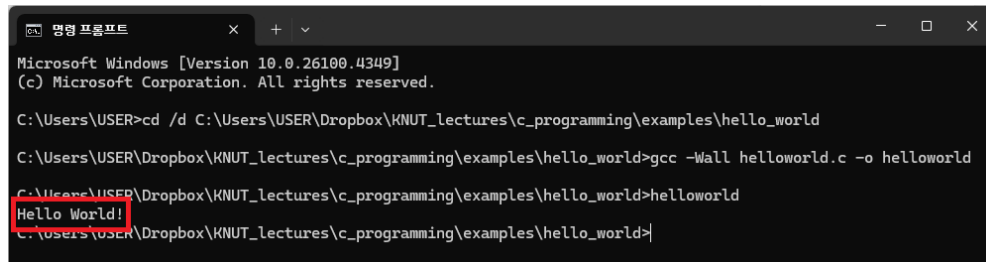
cd /d <helloworld.c 파일의 경로>

예, cd /d C:\WKNUTWC_programming\examples\helloworld

C. 소스 코드(.c 파일)를 컴파일 및 실행

gcc -Wall **infilename.c** -o **outfilename**

예, gcc -Wall **helloworld.c** -o **helloworld**



```
명령 프롬프트
Microsoft Windows [Version 10.0.26100.4349]
(c) Microsoft Corporation. All rights reserved.

C:\Users\USER>cd /d C:\Users\USER\Dropbox\KNUT_lectures\c_programming\examples\hello_world

C:\Users\USER\Dropbox\KNUT_lectures\c_programming\examples\hello_world>gcc -Wall helloworld.c -o helloworld

C:\Users\USER\Dropbox\KNUT_lectures\c_programming\examples\hello_world>helloworld
Hello World!
C:\Users\USER\Dropbox\KNUT_lectures\c_programming\examples\hello_world>|
```