Mini Project 3
Othello AI

Environment Settings Tutorial

Introduction

- This tutorial shows how to install required software to compile and execute this project
- There are also some troubleshooting steps
- Tutorial for Windows and Mac are both included

For All Students

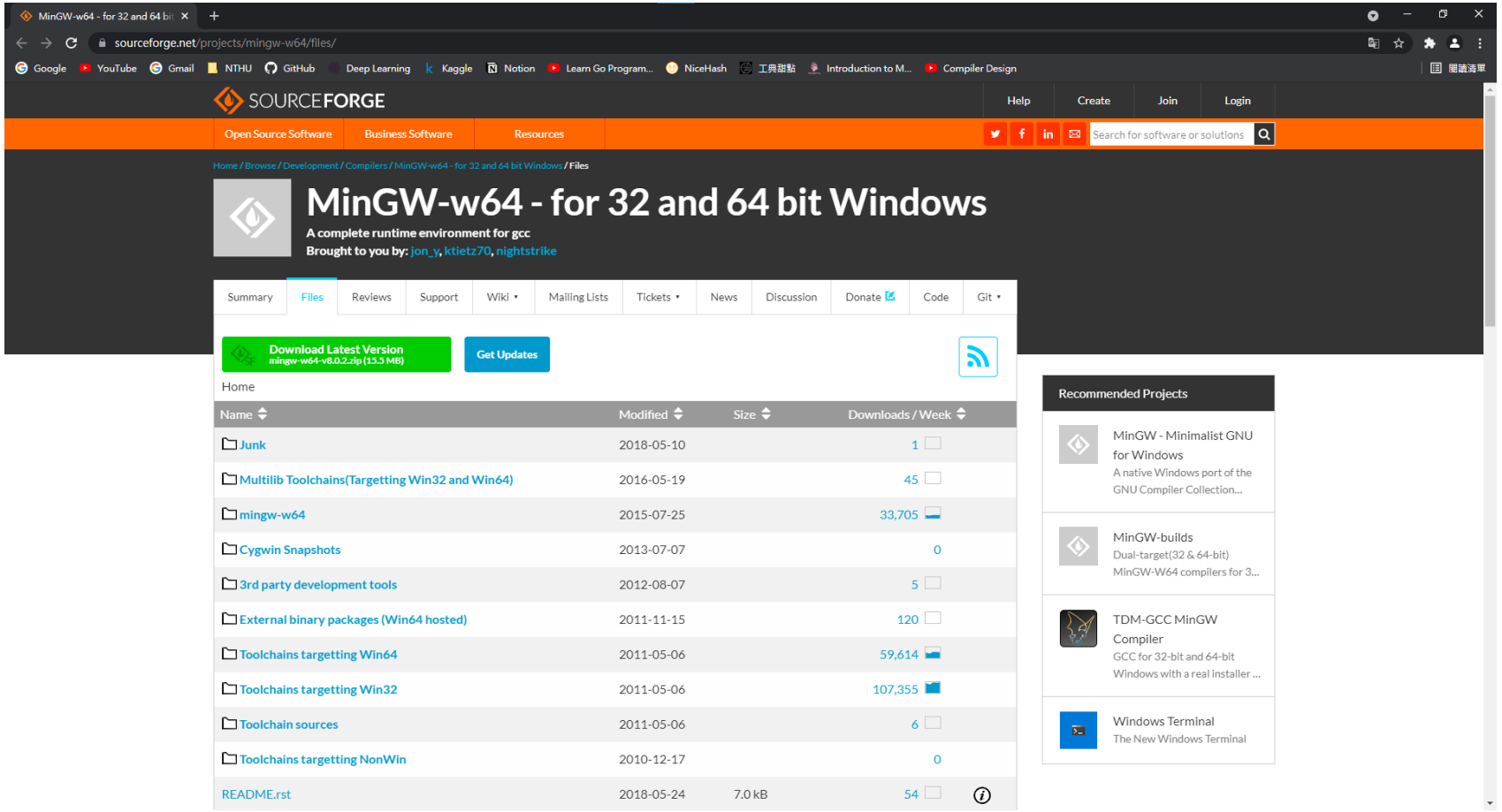
- Please do not use IDEs to compile and run this project
  - Code Blocks, Dev-C++, Visual Studio, Xcode
- Please use command line interfaces to compile and run this project
  - Cmd, PowerShell, Terminal
- You can use anything to write your code
  - We recommend VSCode

For Windows Users

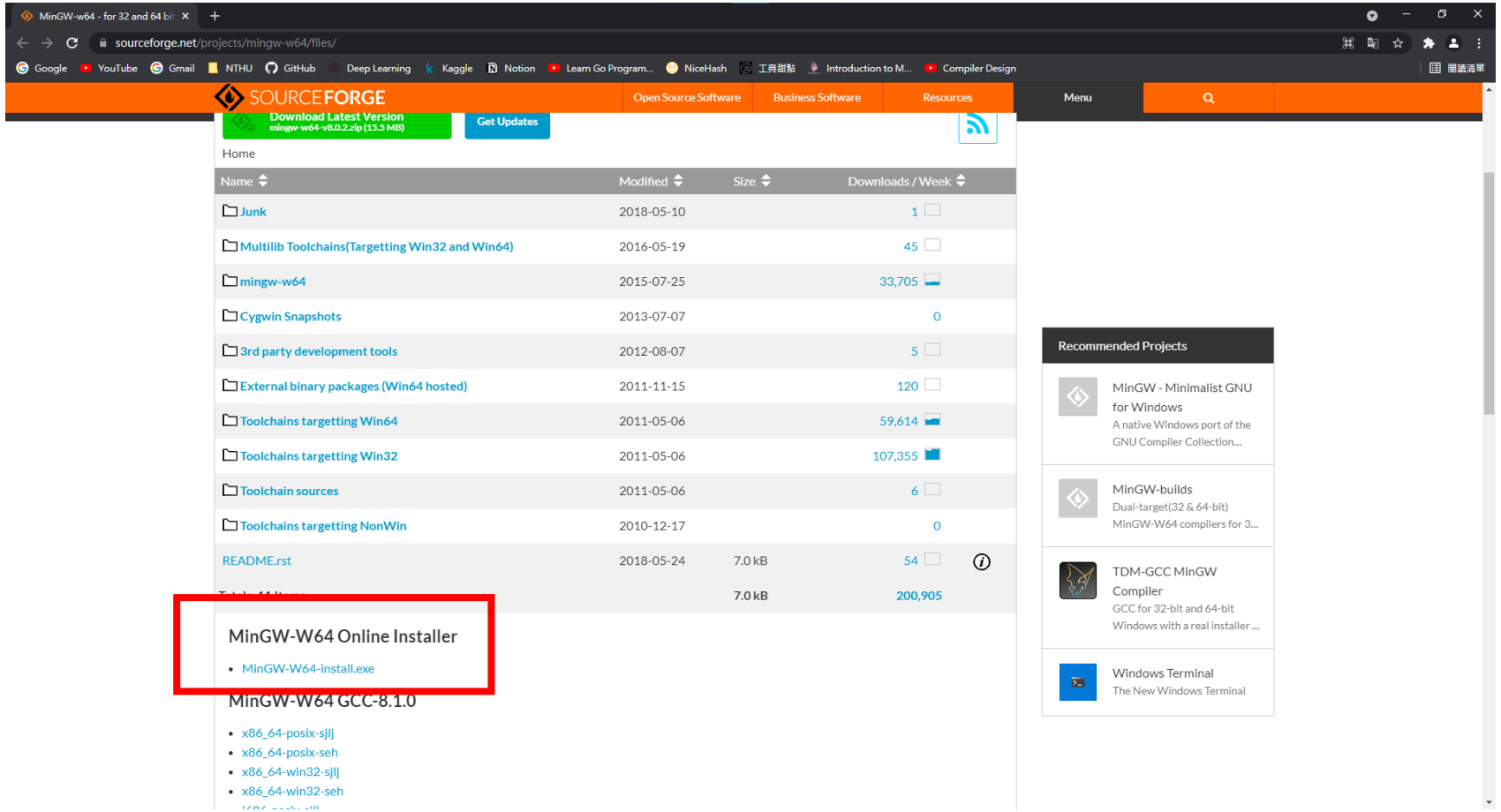
For Windows Users

1. Install mingw-w64
2. Compile your code
3. Execute your code
4. Troubleshooting

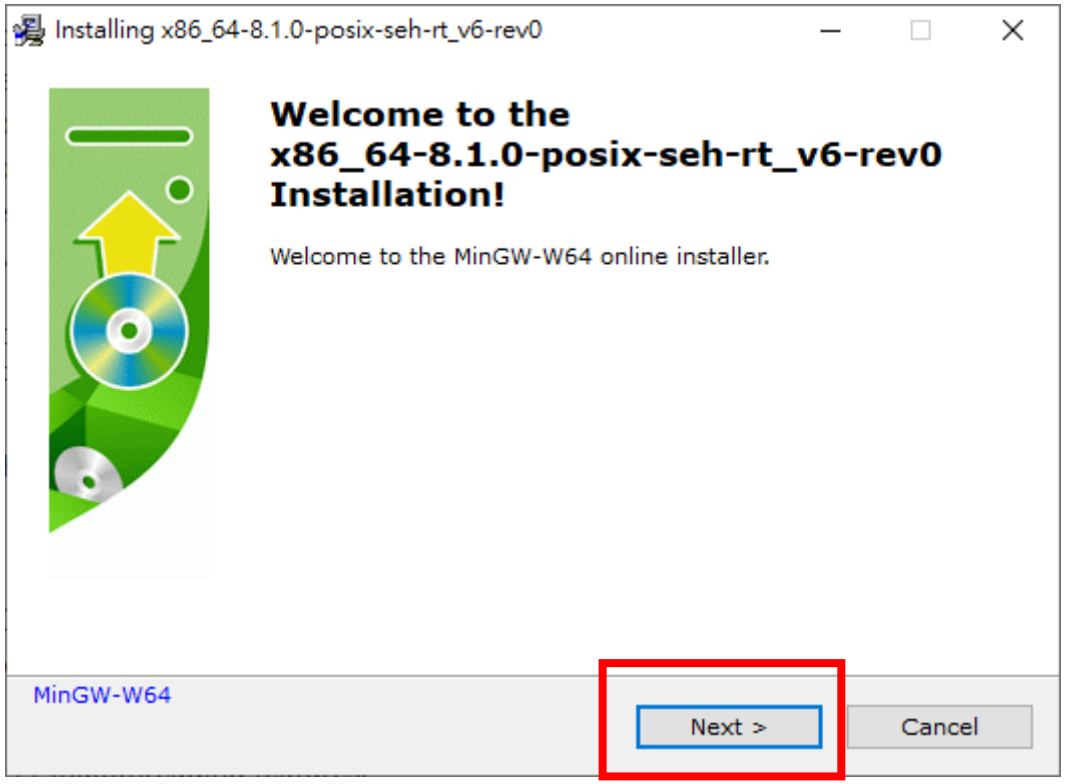
Go to MinGW-W64 Download Page



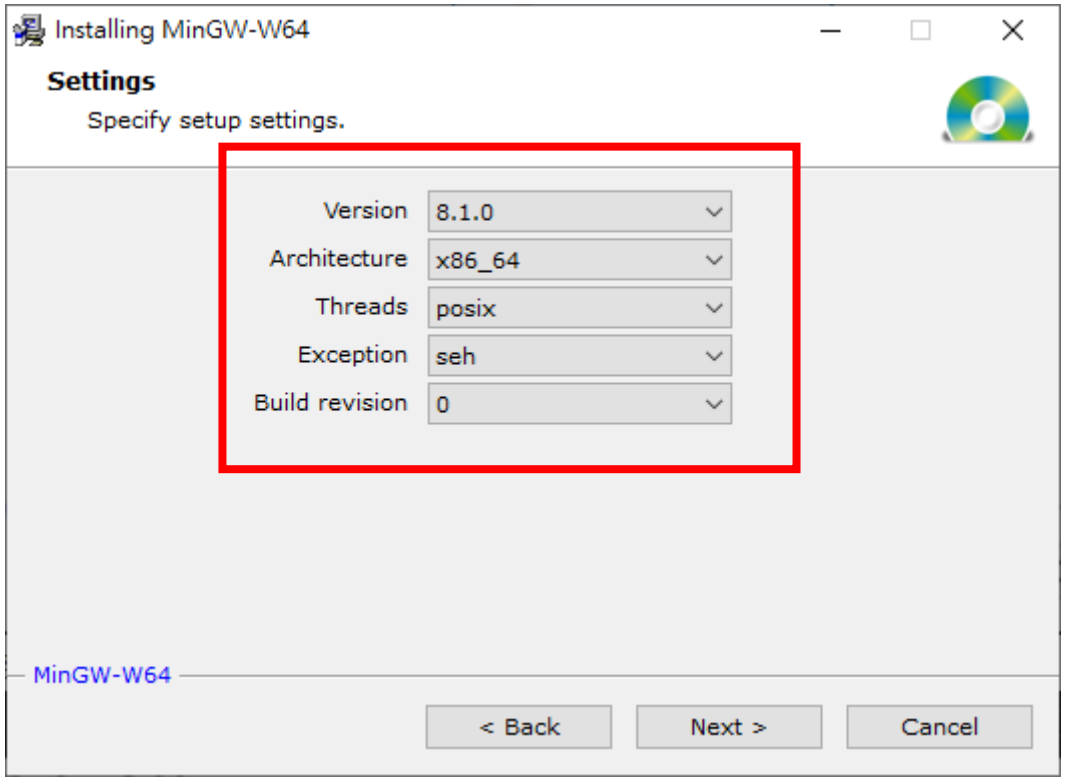
Download MinGW-W64 Online Installer



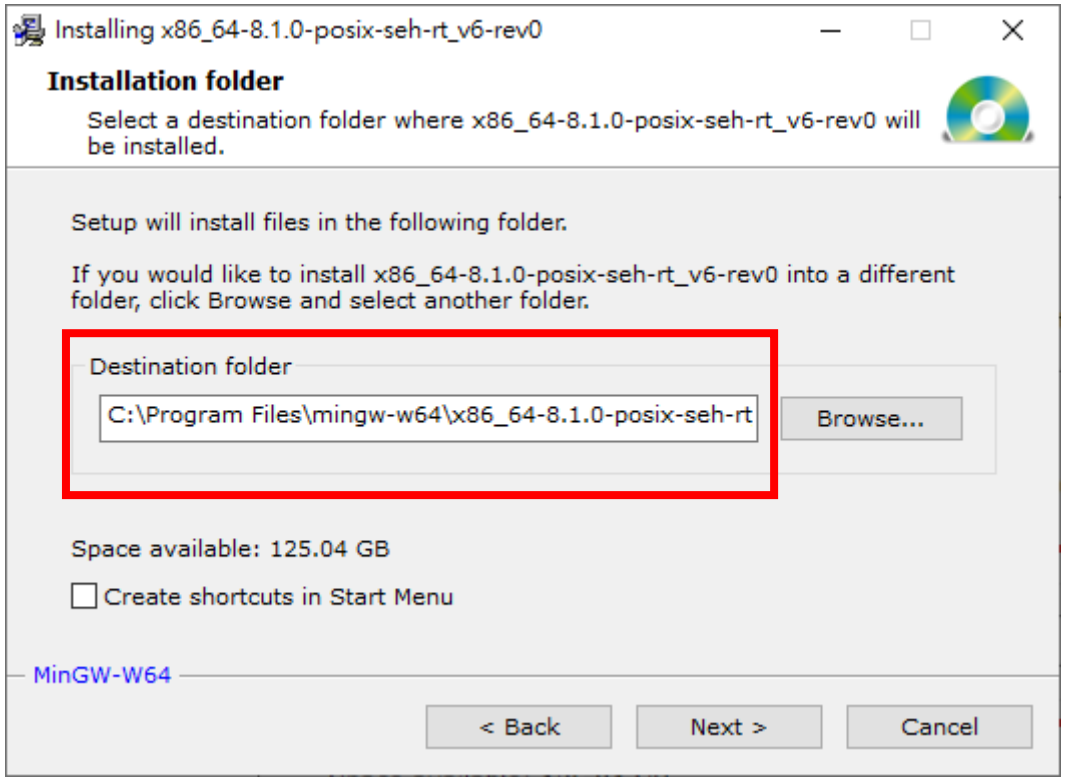
Start the installer, click next



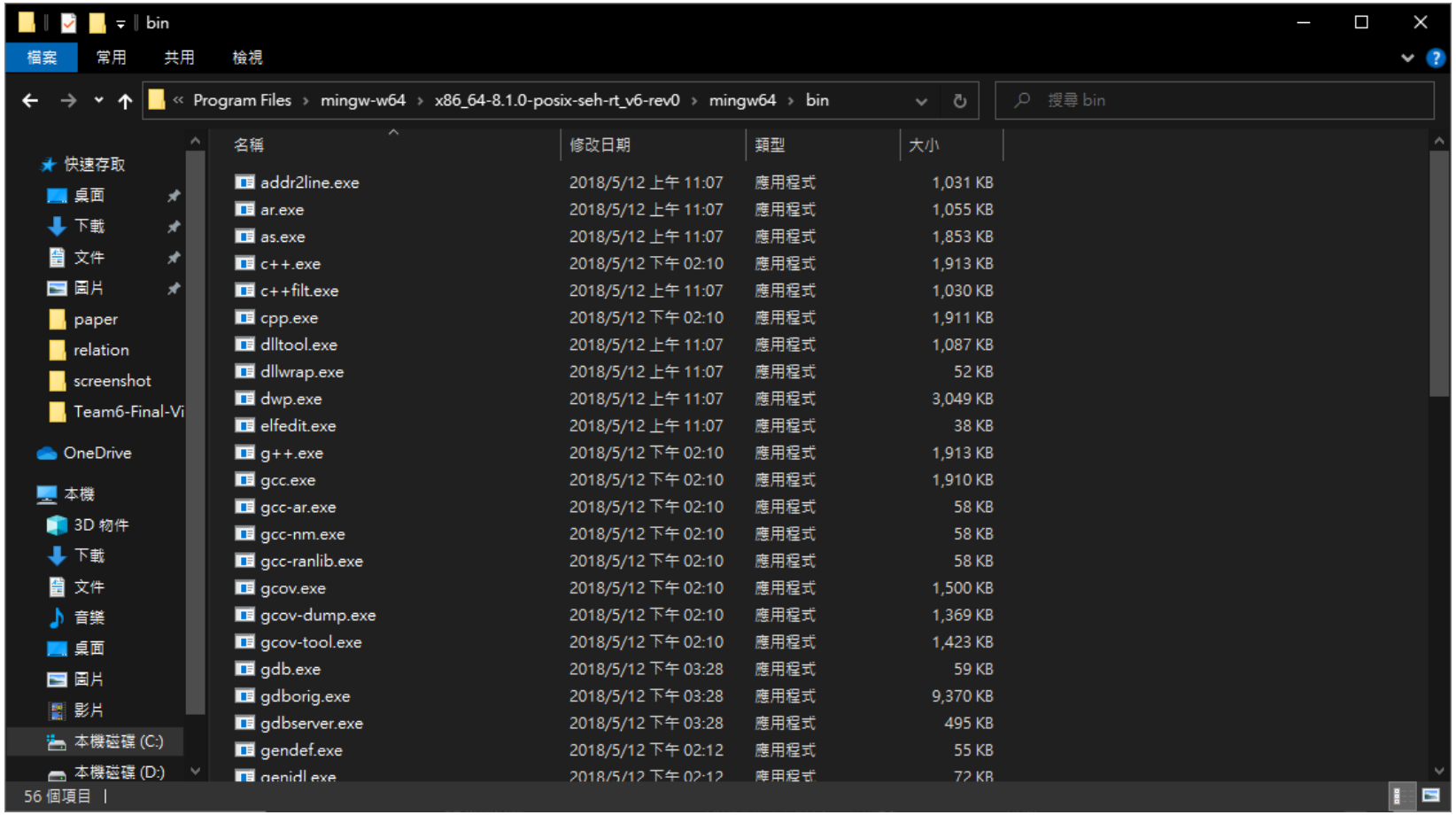
Pick right options according to the screenshot



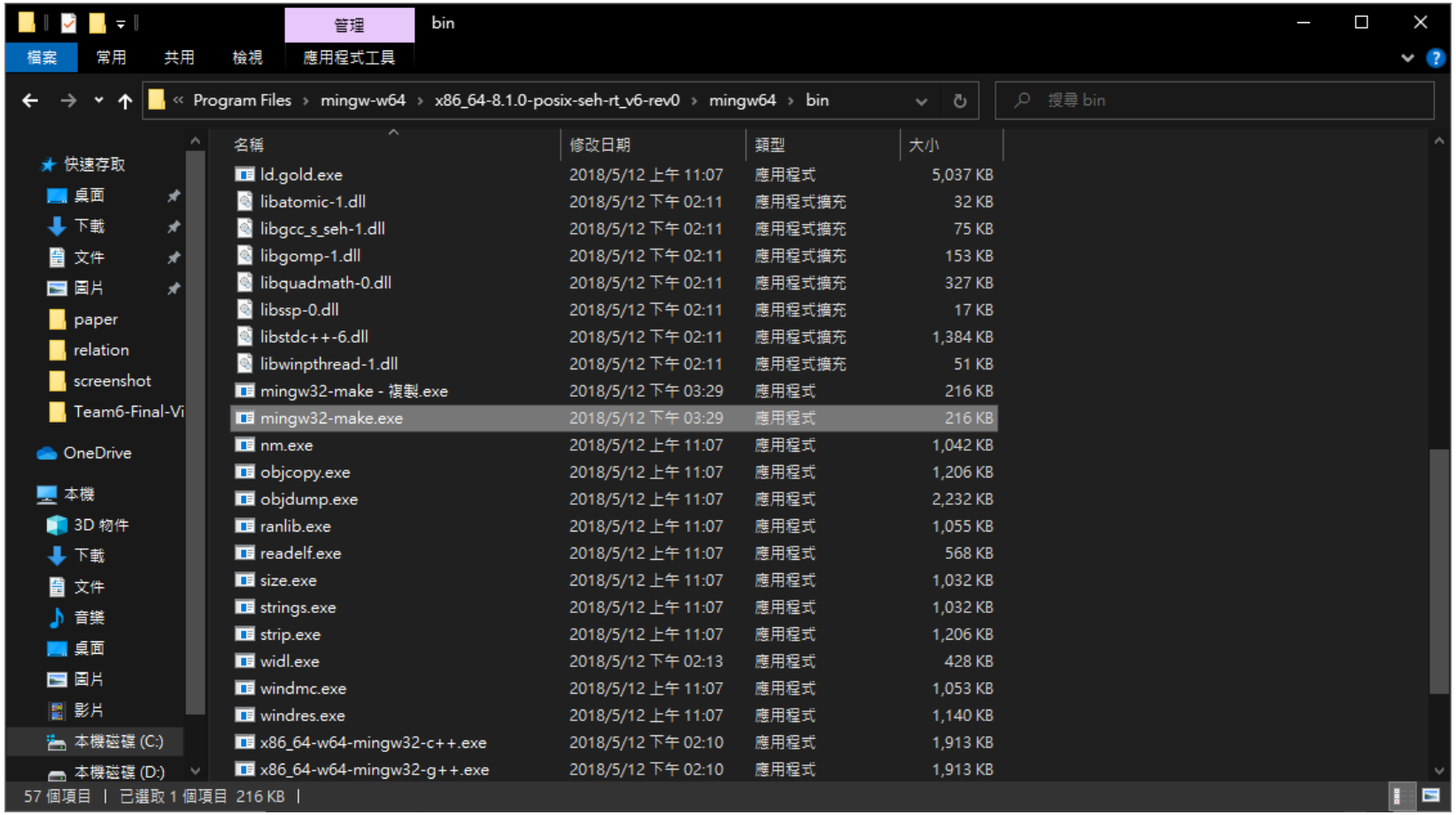
Make sure you remember the install path



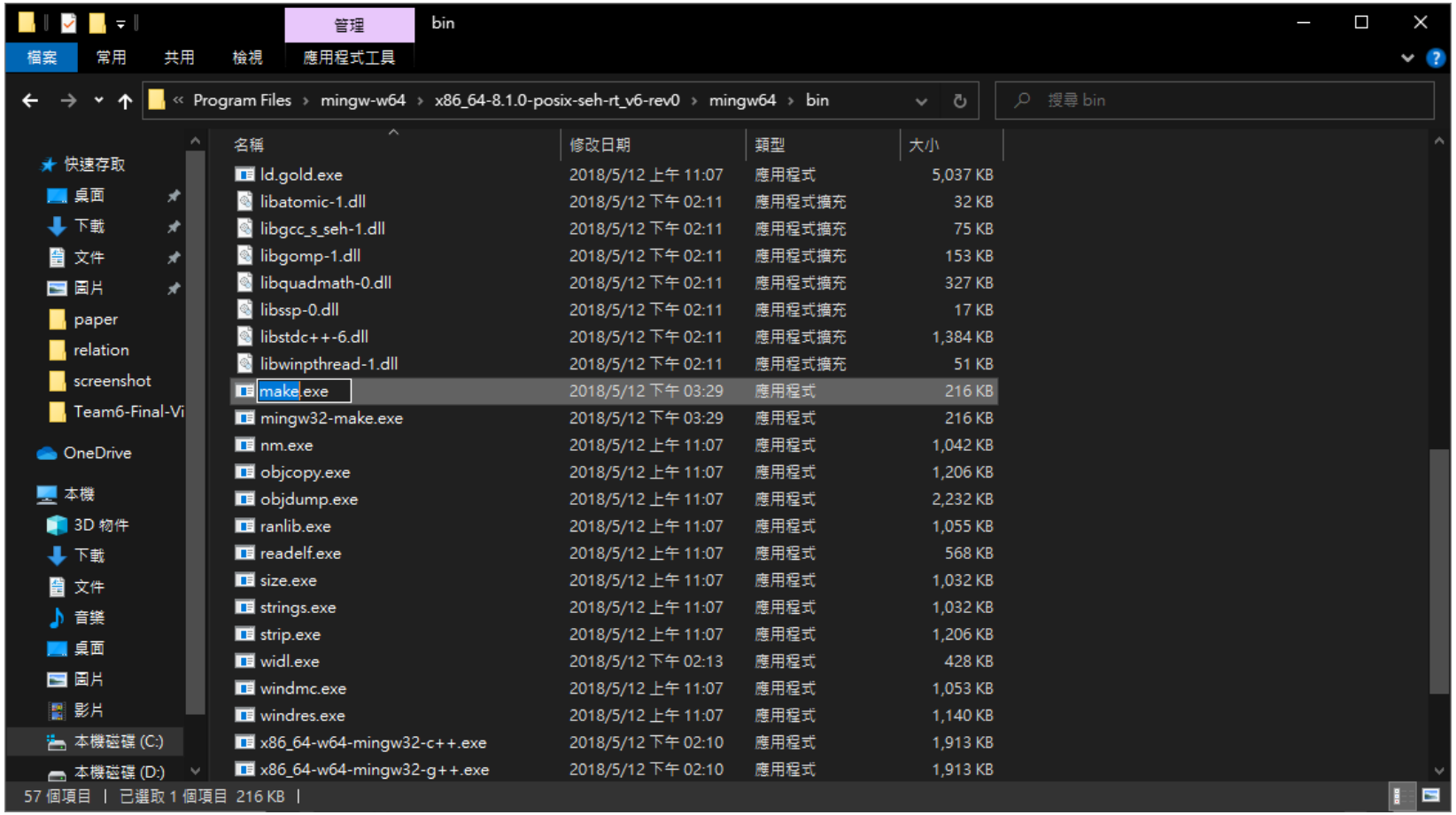
Go to **“[install_path]/mingw64/bin”**



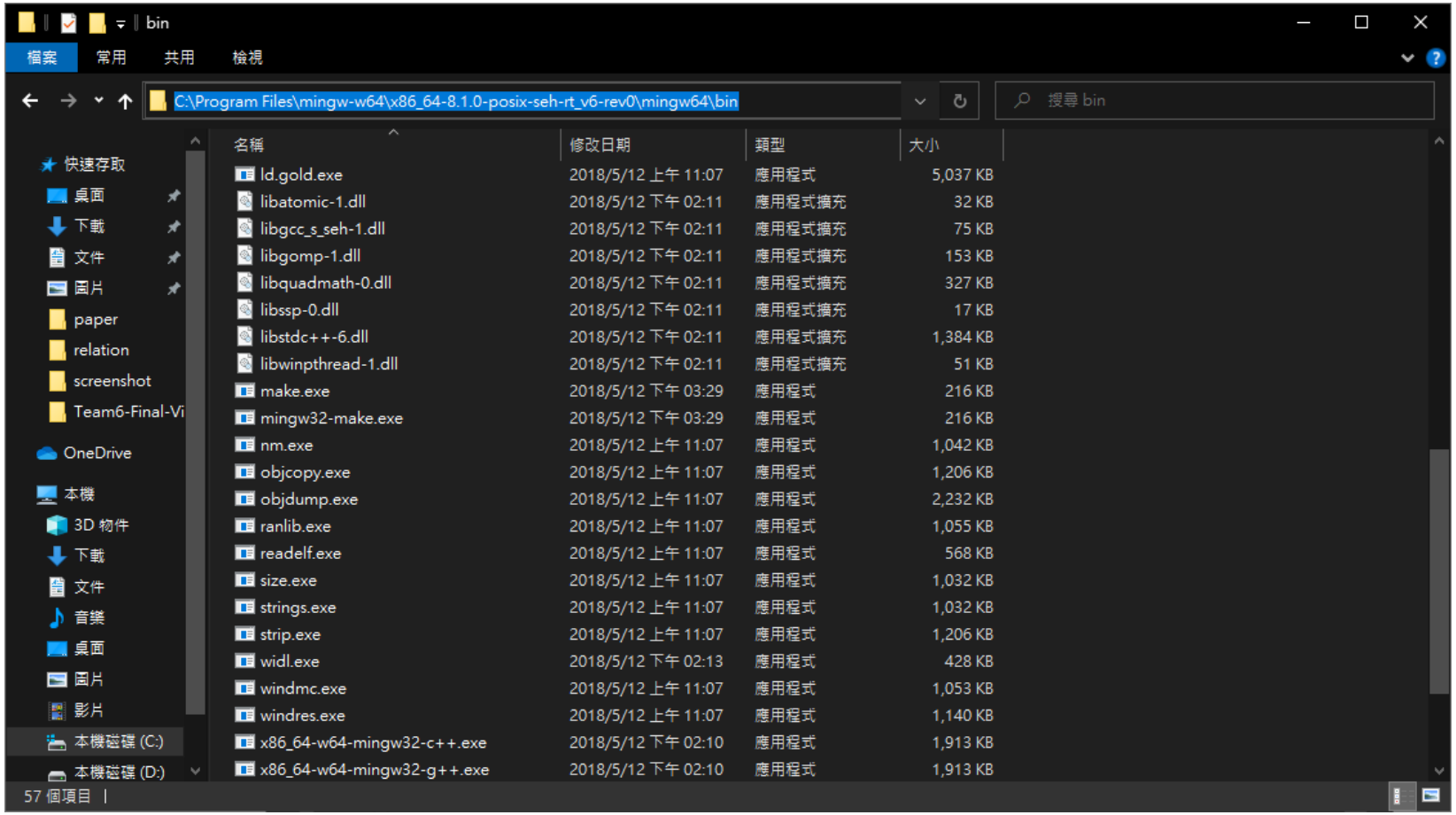
Find “**mingw32-make.exe**” and copy it



Rename the copied file to **“make.exe”**



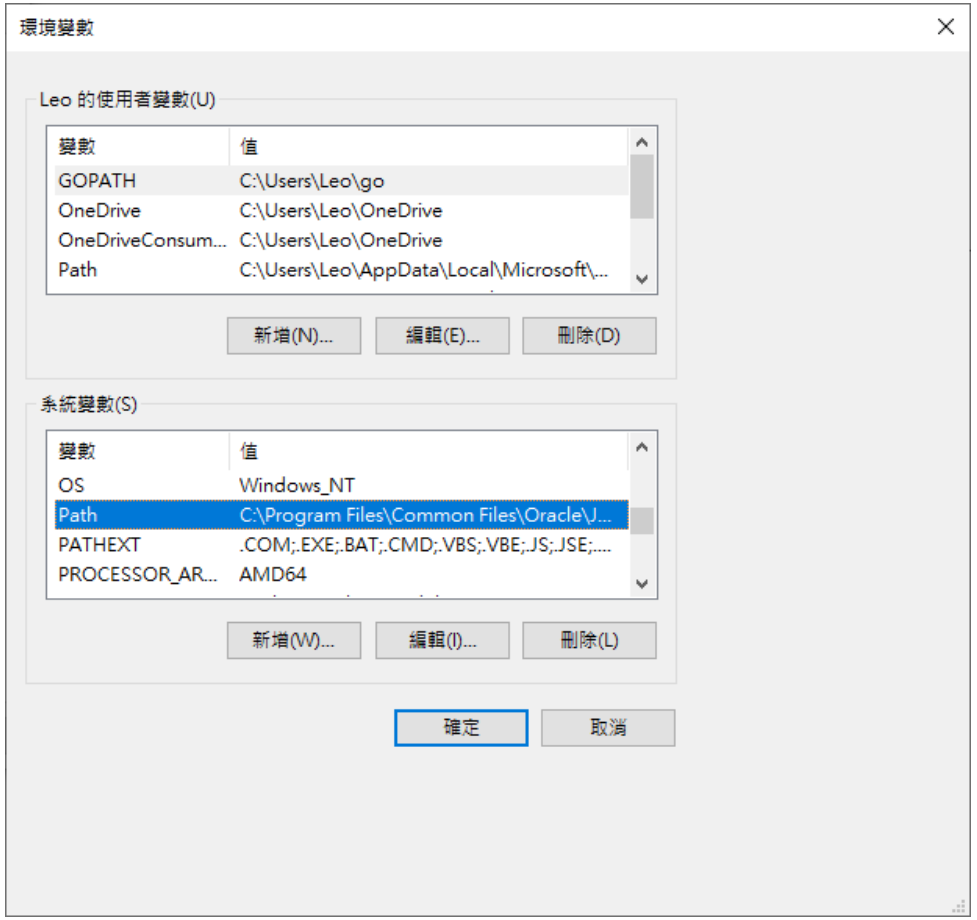
Copy the path of this folder



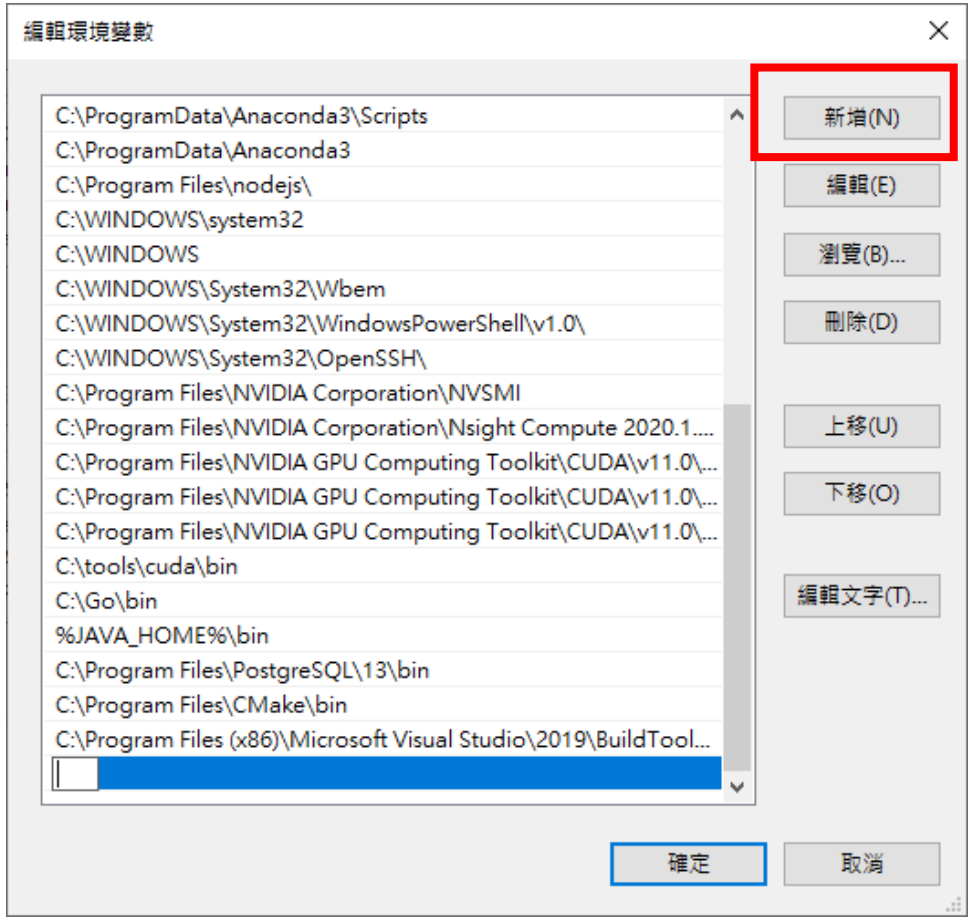
Search for environment variable

Click the “environment variable” button

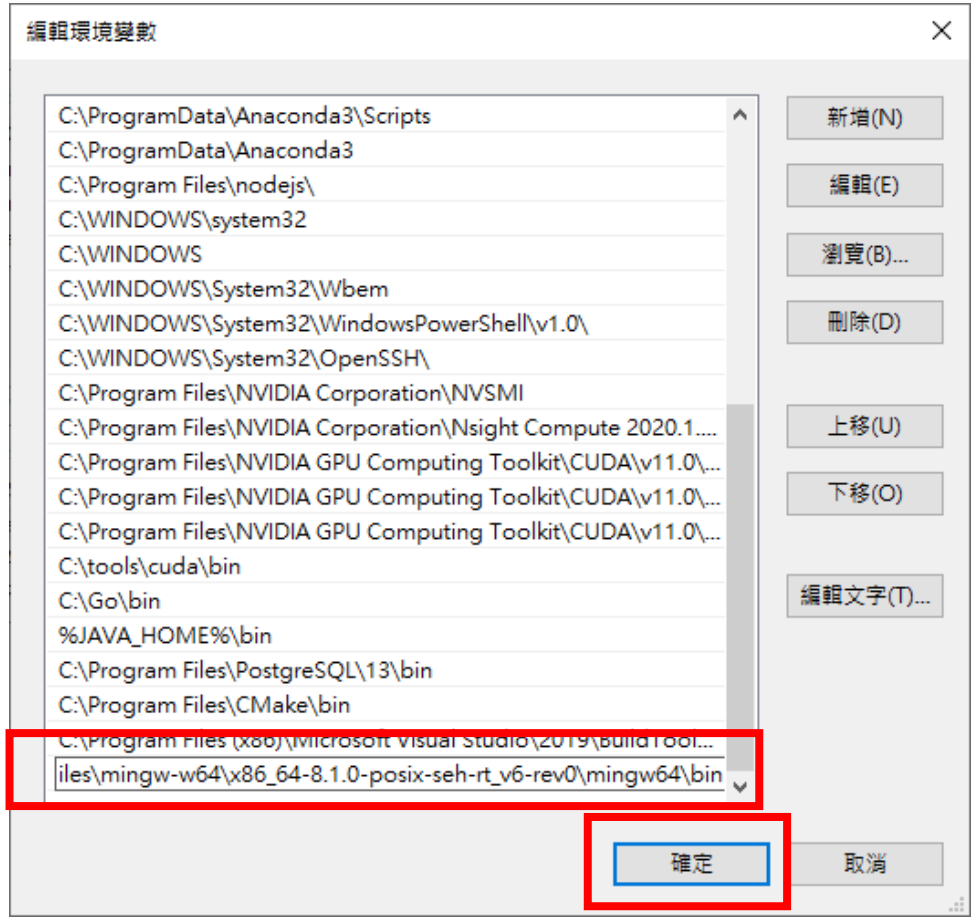
Double click “Path”



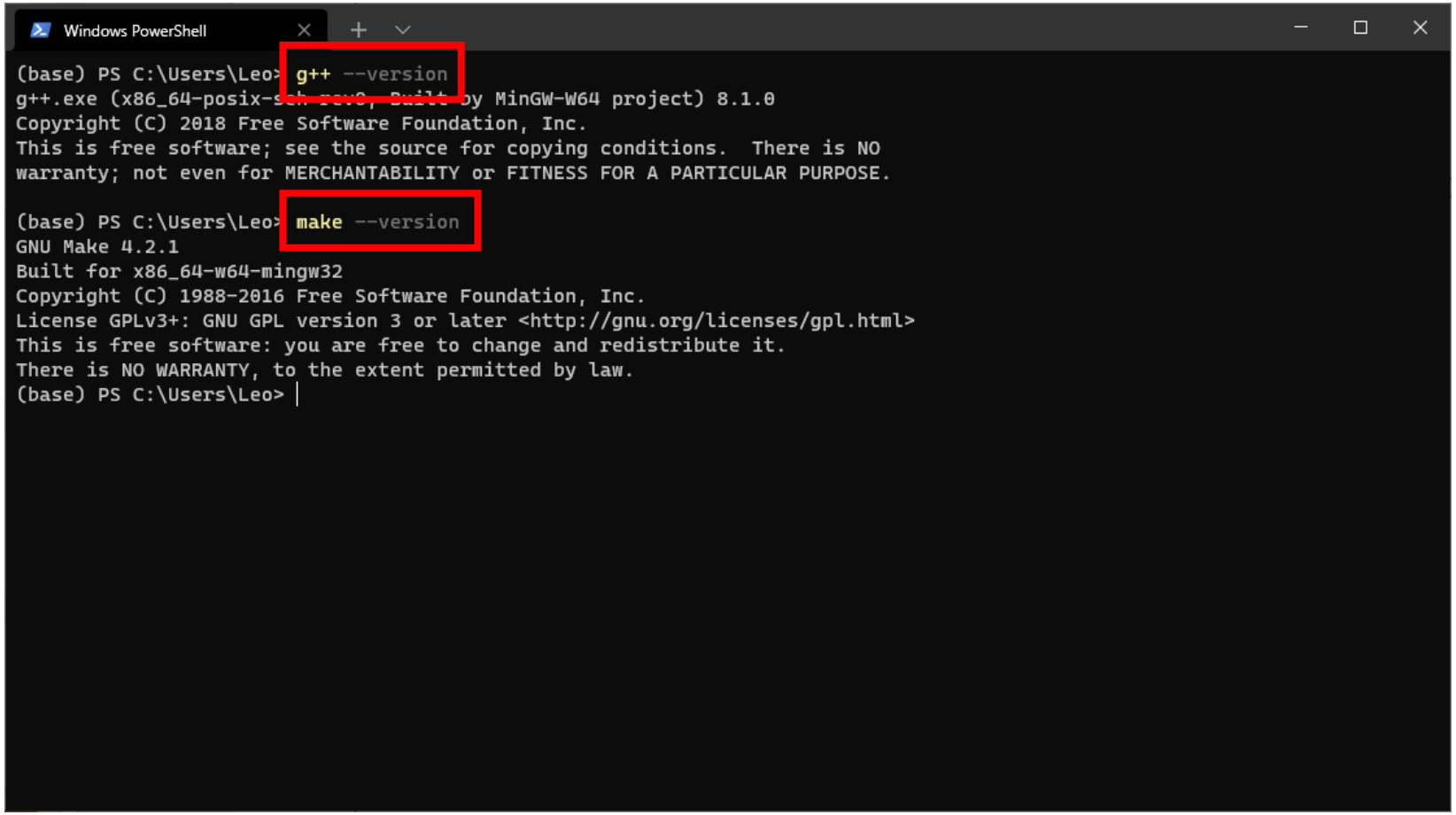
Click “New”


編輯環境變數
C:\ProgramData\Anaconda3\Scripts
C:\ProgramData\Anaconda3
C:\Program Files\nodejs\
C:\WINDOWS\system32
C:\WINDOWS
C:\WINDOWS\System32\Wbem
C:\WINDOWS\System32\WindowsPowerShell\v1.0\
C:\WINDOWS\System32\OpenSSH\
C:\Program Files\NVIDIA Corporation\NVSMI
C:\Program Files\NVIDIA Corporation\Nsight Compute 2020.1....
C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v11.0\...
C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v11.0\...
C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v11.0\...
C:\tools\cuda\bin
C:\Go\bin
%JAVA_HOME%\bin
C:\Program Files\PostgreSQL\13\bin
C:\Program Files\CMake\bin
C:\Program Files (x86)\Microsoft Visual Studio\2019\BuildTool...
新增(N)
編輯(E)
瀏覽(B)...
刪除(D)
上移(U)
下移(O)
編輯文字(T)...
確定
取消

Paste the path and click “OK”



Open cmd or PowerShell to validate installation



For Windows Users

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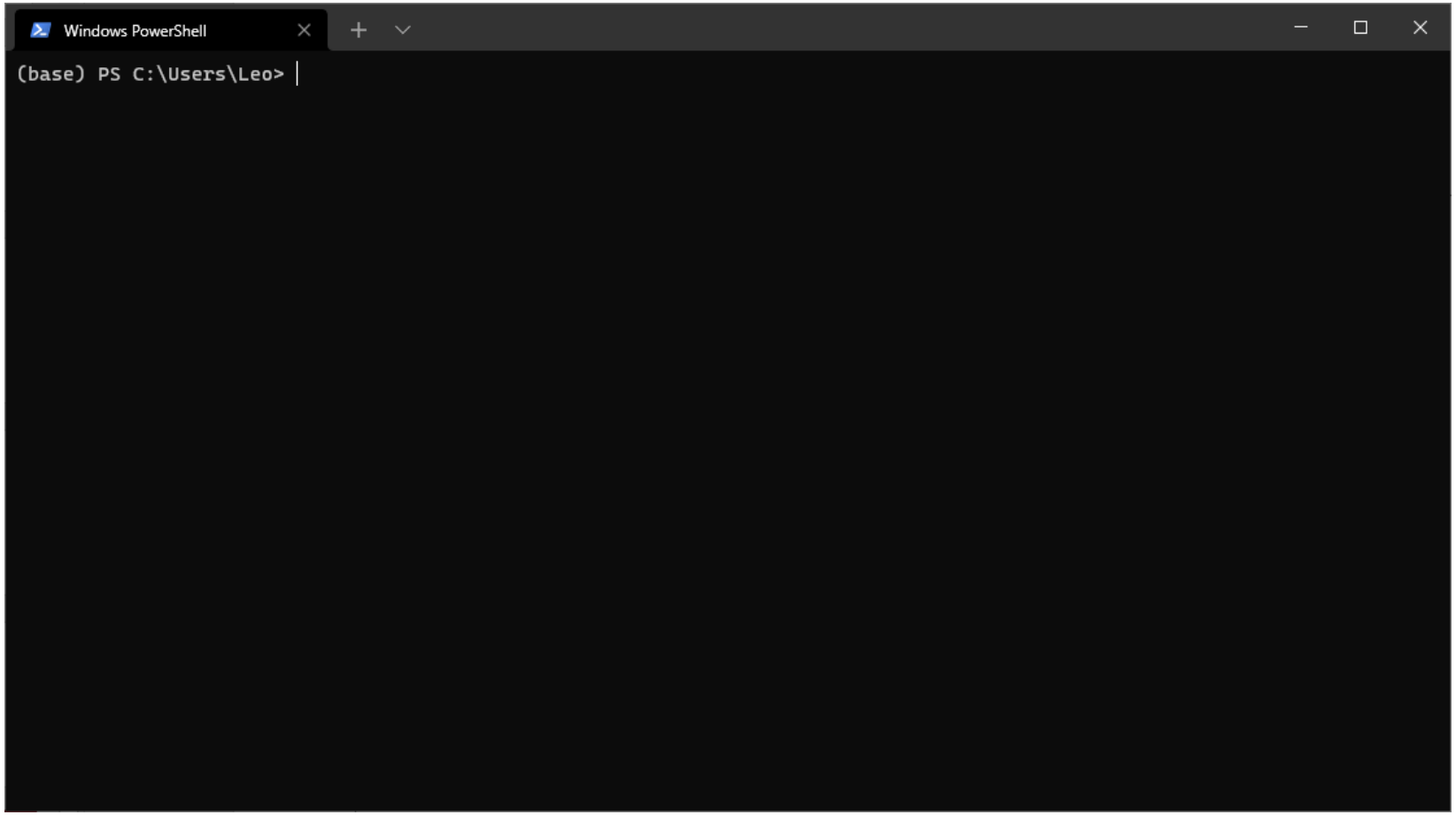
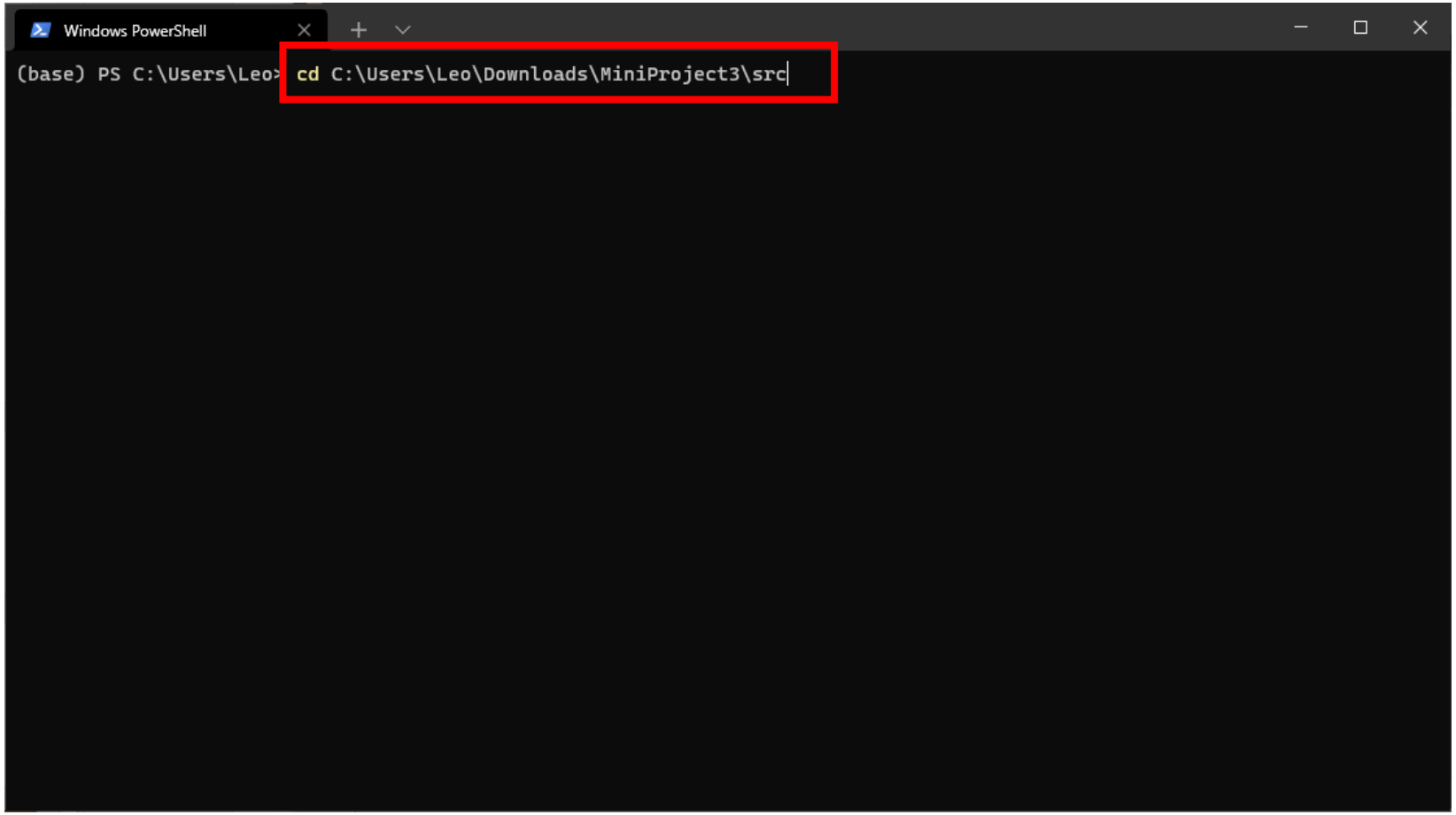
3. Execute your code
4. Troubleshooting

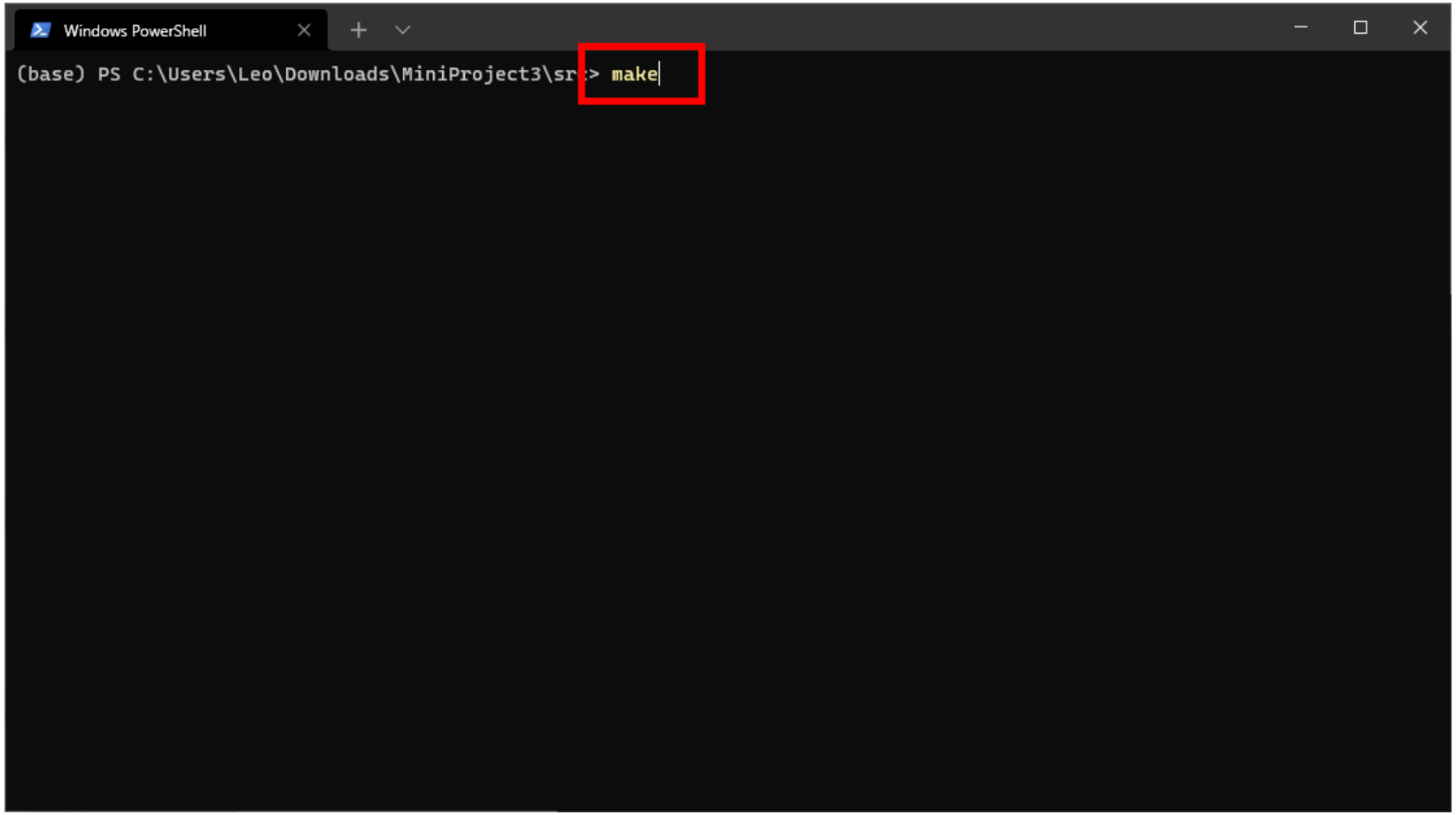
Open cmd or Powershell



Change directory by entering **“cd [project_path]/src”**



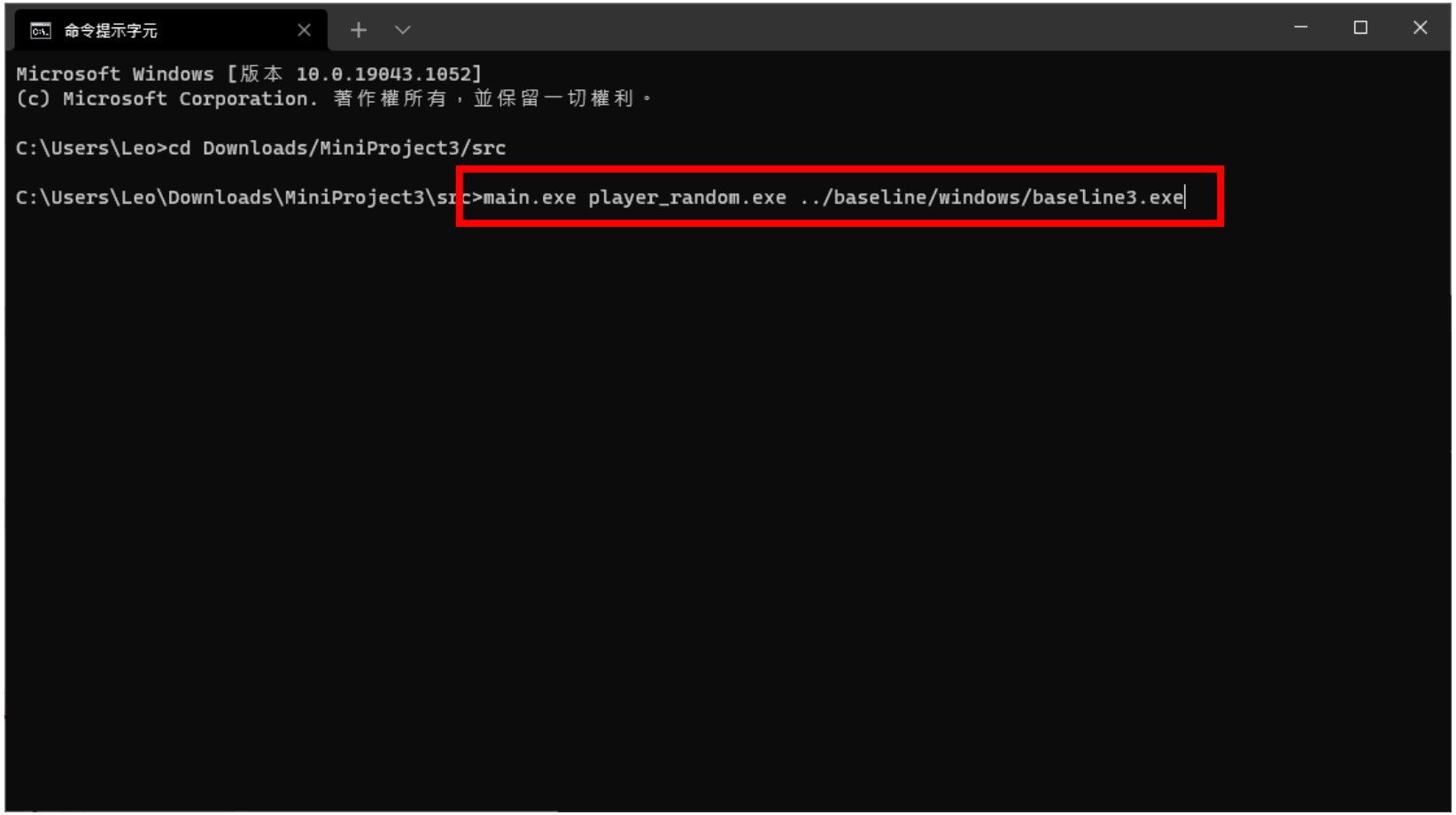
Type **“make”** to compile your code



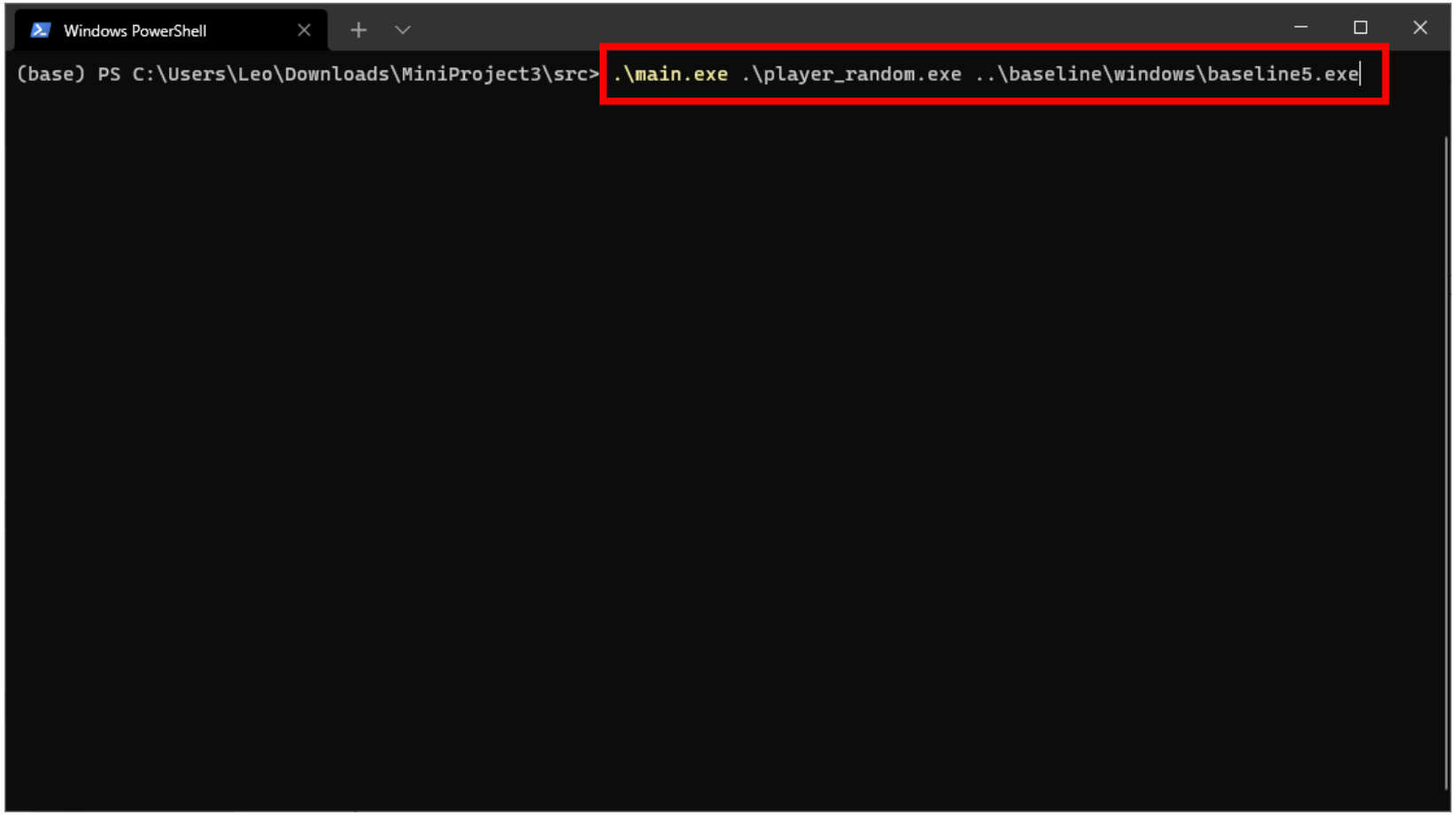
For Windows Users

1. Install mingw-w64
2. Compile your code
3. Execute your code
4. Troubleshooting

If you use cmd, type **“main.exe [AI1].exe [AI2].exe”** while in the “src” folder of your project



If you use PowerShell, type **“.\main.exe [AI1].exe [AI2].exe”** while in the “src” folder of your project



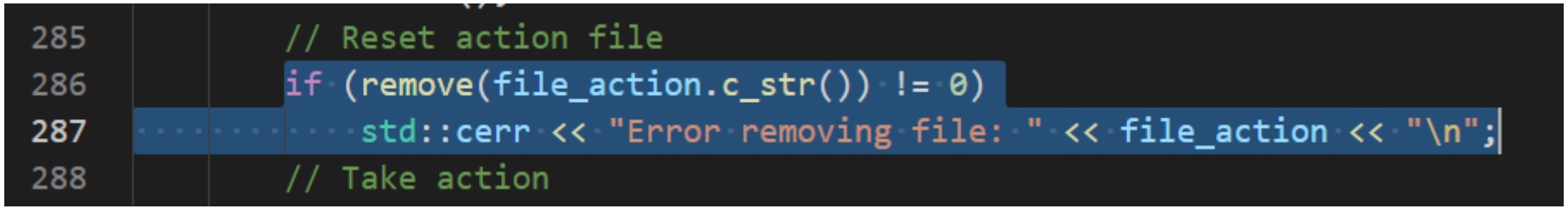
For Windows Users

1. Install mingw-w64
2. Compile your code
3. Execute your code
4. Troubleshooting

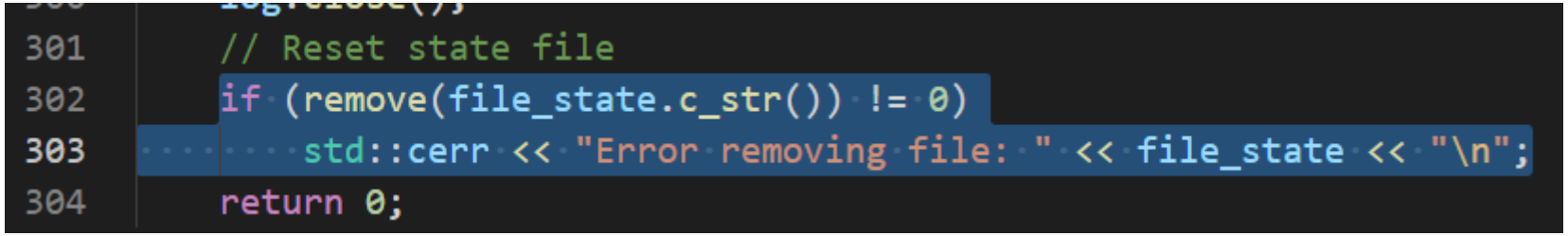
Error removing file: (state/action)

- If you encounter this problem, do these steps and compile again

1. Comment line 286, 287 in main.cpp



2. Comment line 302, 303 in main.cpp



Error removing file: (state/action)

- If the solution on the previous page still cannot solve the problem
- You can try increasing the timeout limit on line 235 to 5 ~ 10

```
231  const std::string file_log = "gamelog.txt";
232  const std::string file_state = "state";
233  const std::string file_action = "action";
234  // Timeout is set to 10 when TA test your code.
235  const int timeout = 1;
```

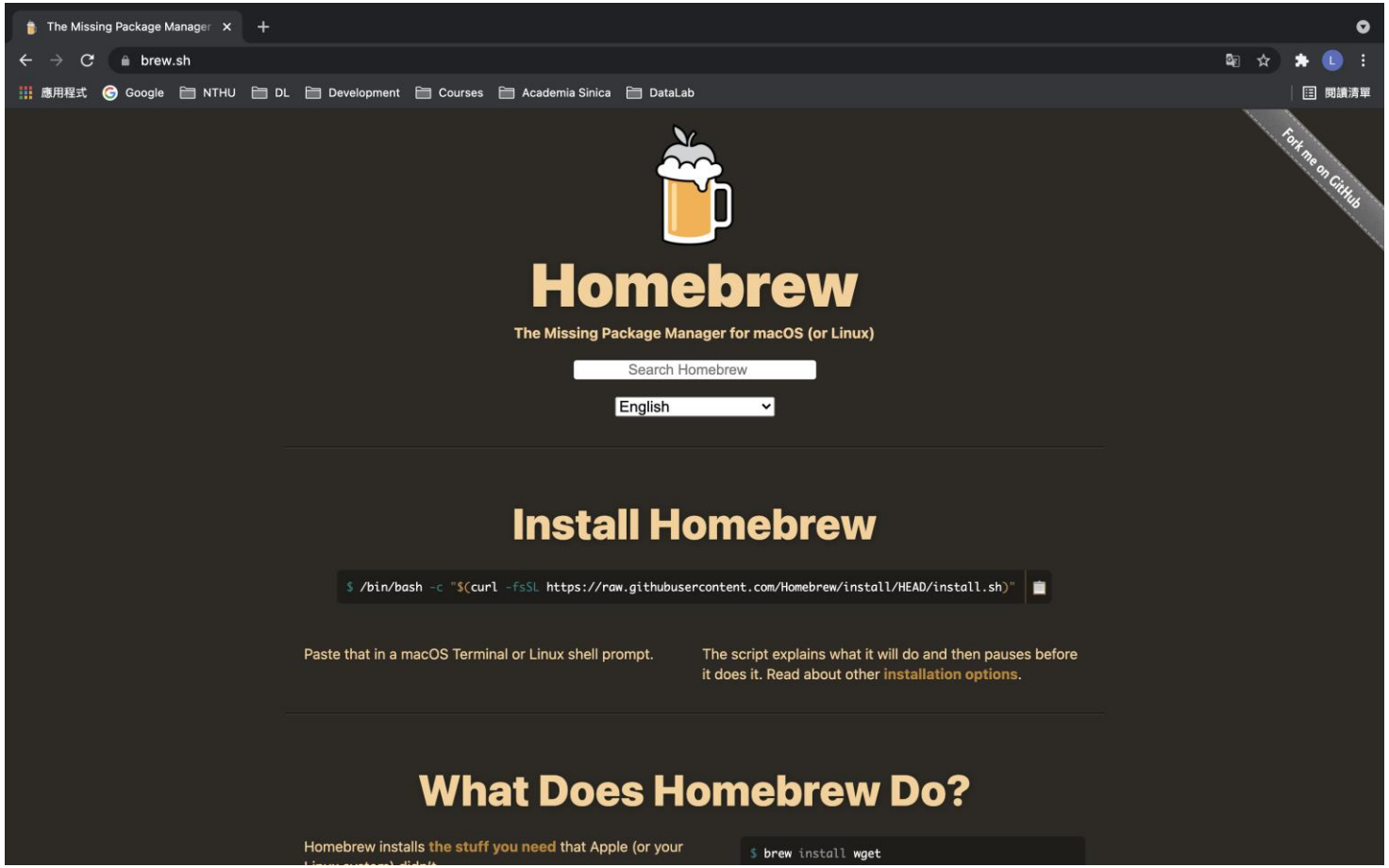
- This might solve the problem

For Mac Users

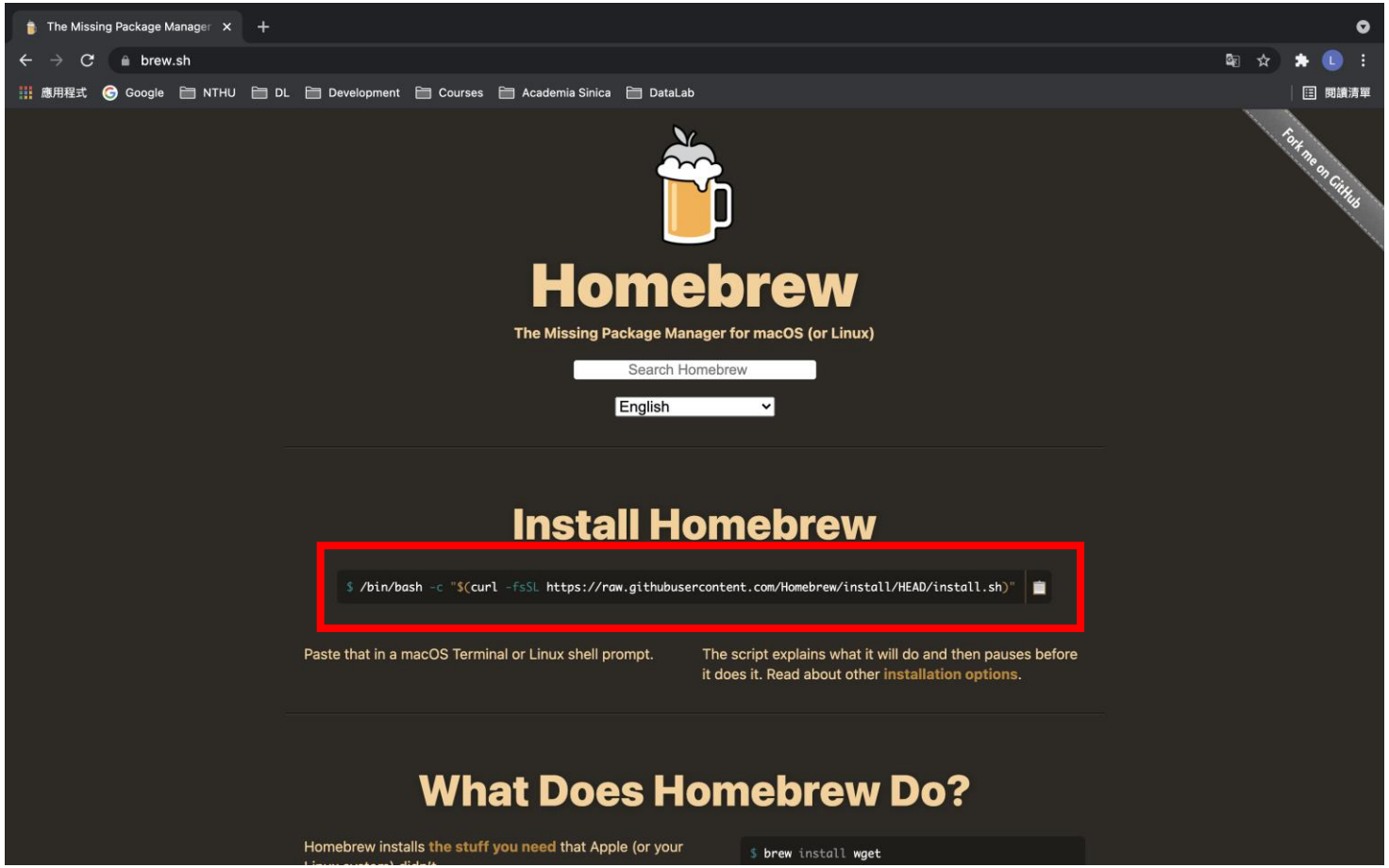
For Mac Users

1. Install Homebrew
2. Install Coreutils
3. Modify file permissions
4. Compile your code
5. Execute your code

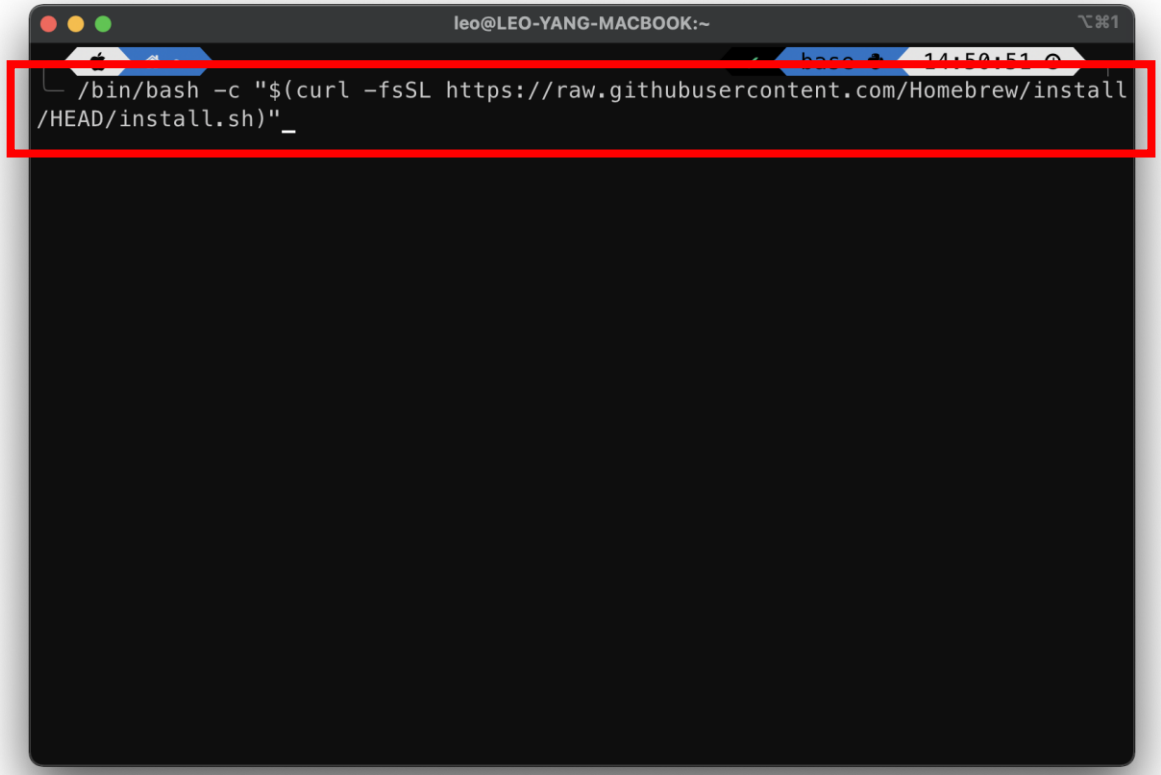
Go to Homebrew homepage



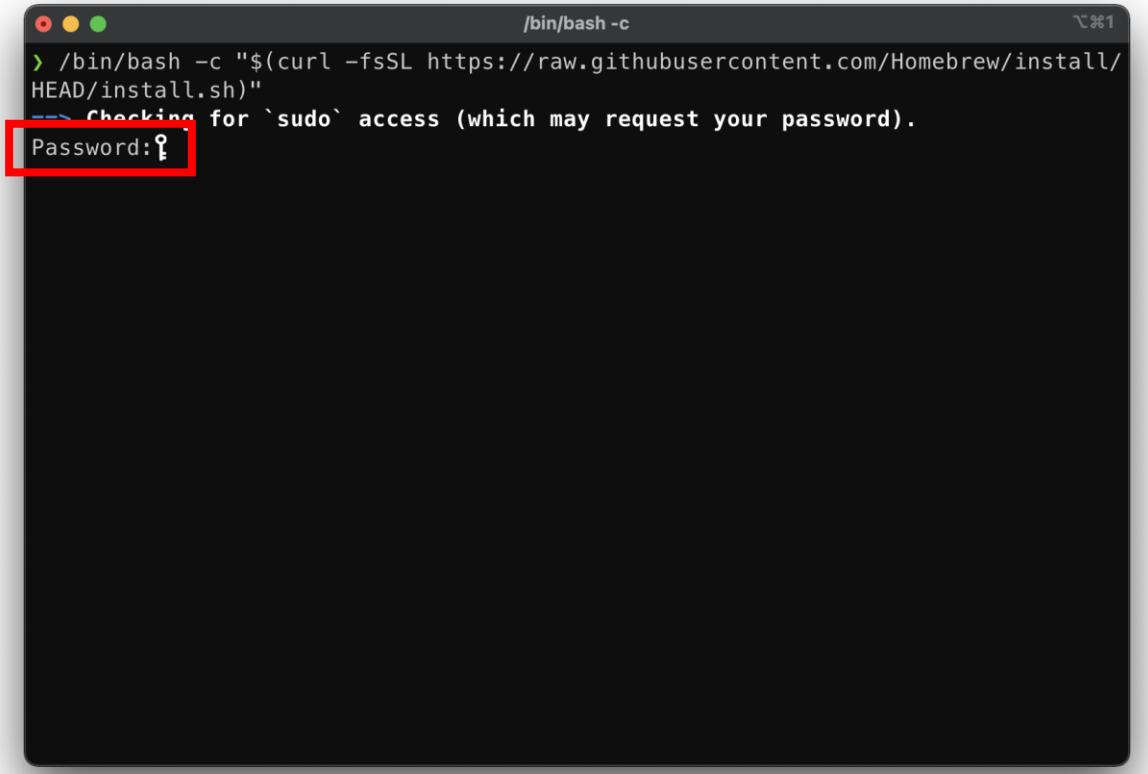
Copy the install command



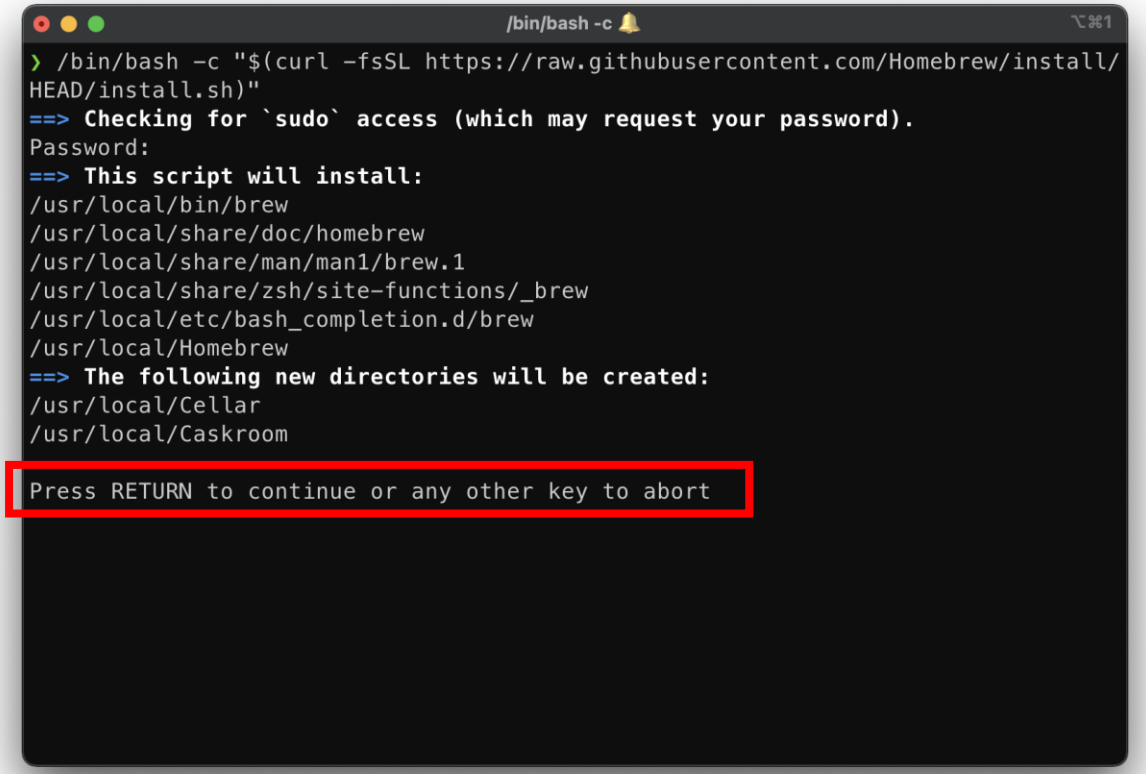
Paste the command in terminal and enter



Enter your password



Press enter to install



For Mac Users

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2. Install Coreutils
3. Modify file permissions
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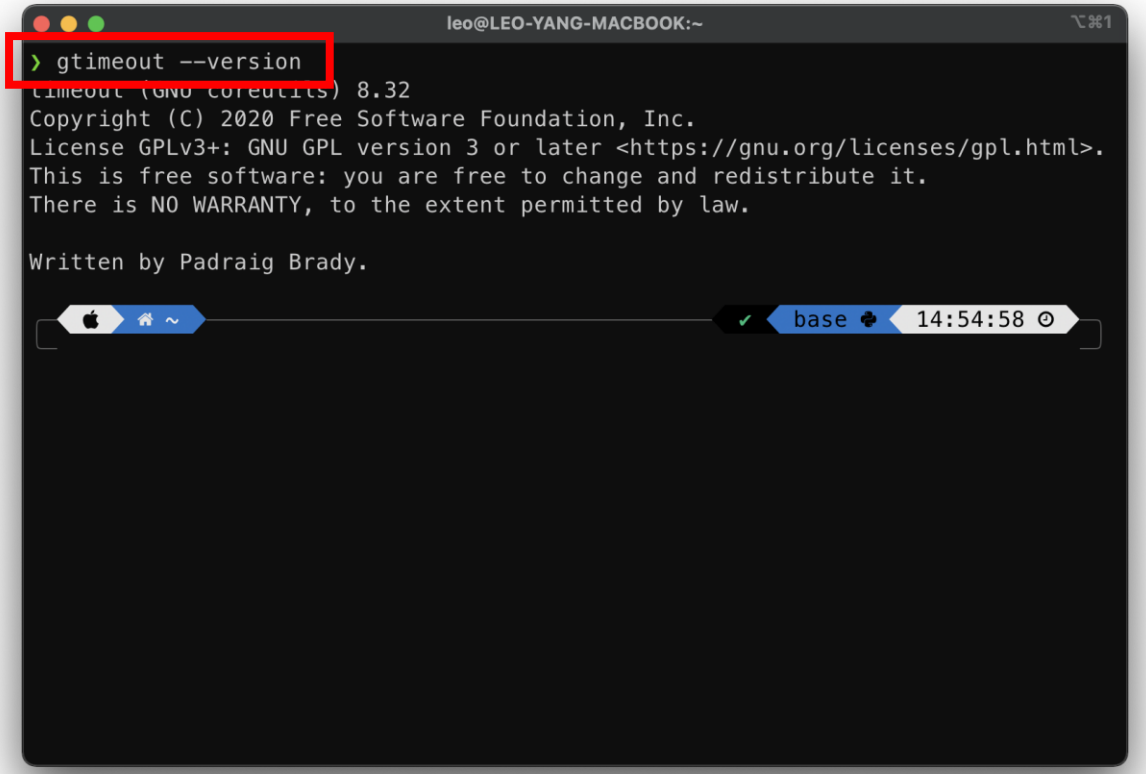
Type **“brew install coreutils”** in terminal

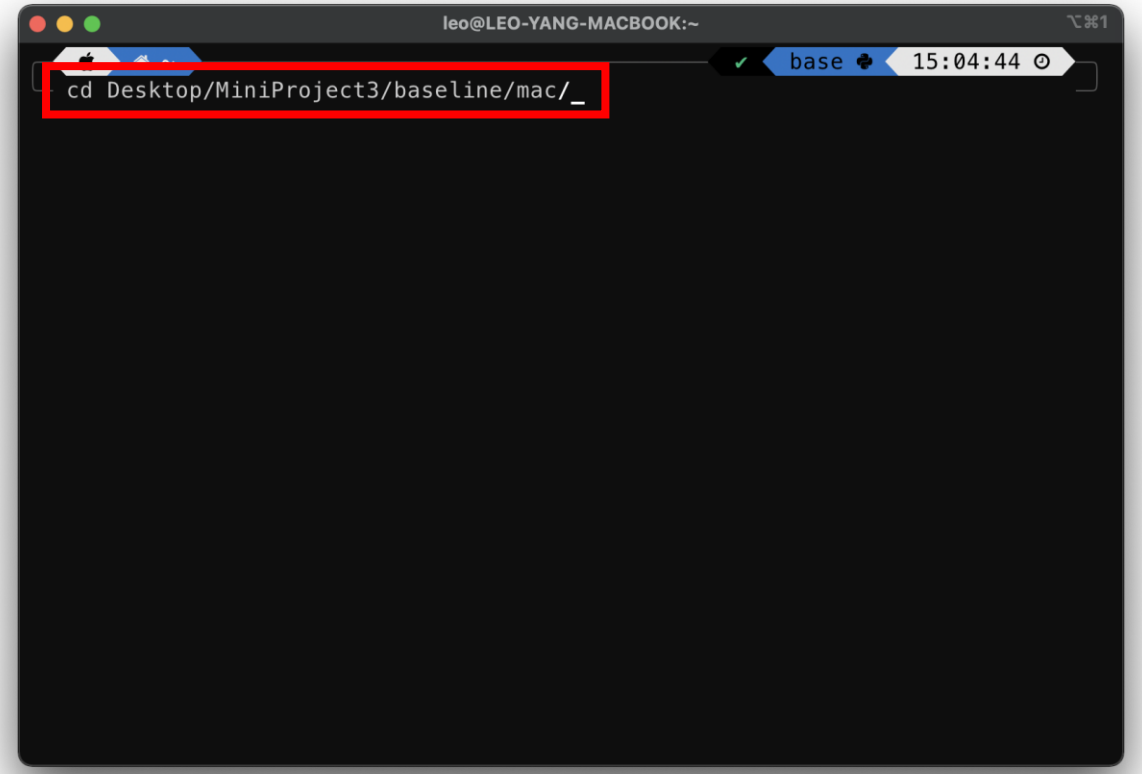
Type **“gtimeout --version”** to check if it works properly



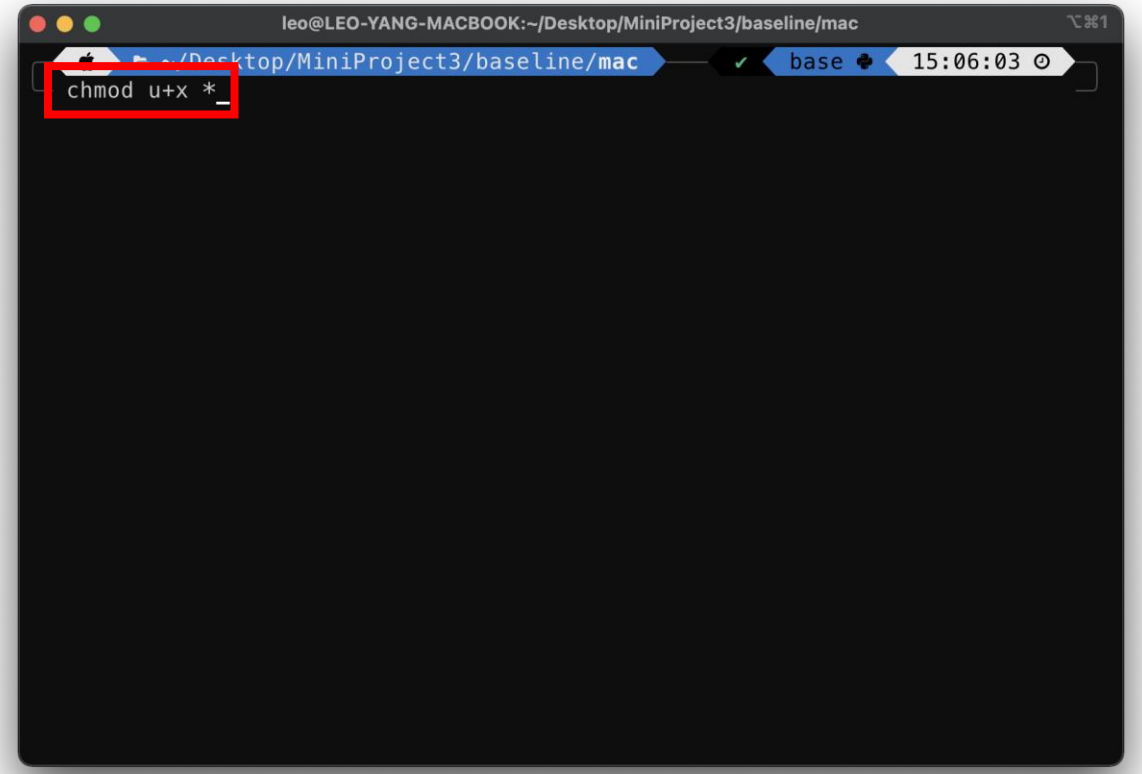
For Mac Users

1. Install Homebrew
2. Install Coreutils
3. Modify file permissions
4. Compile your code
5. Execute your code

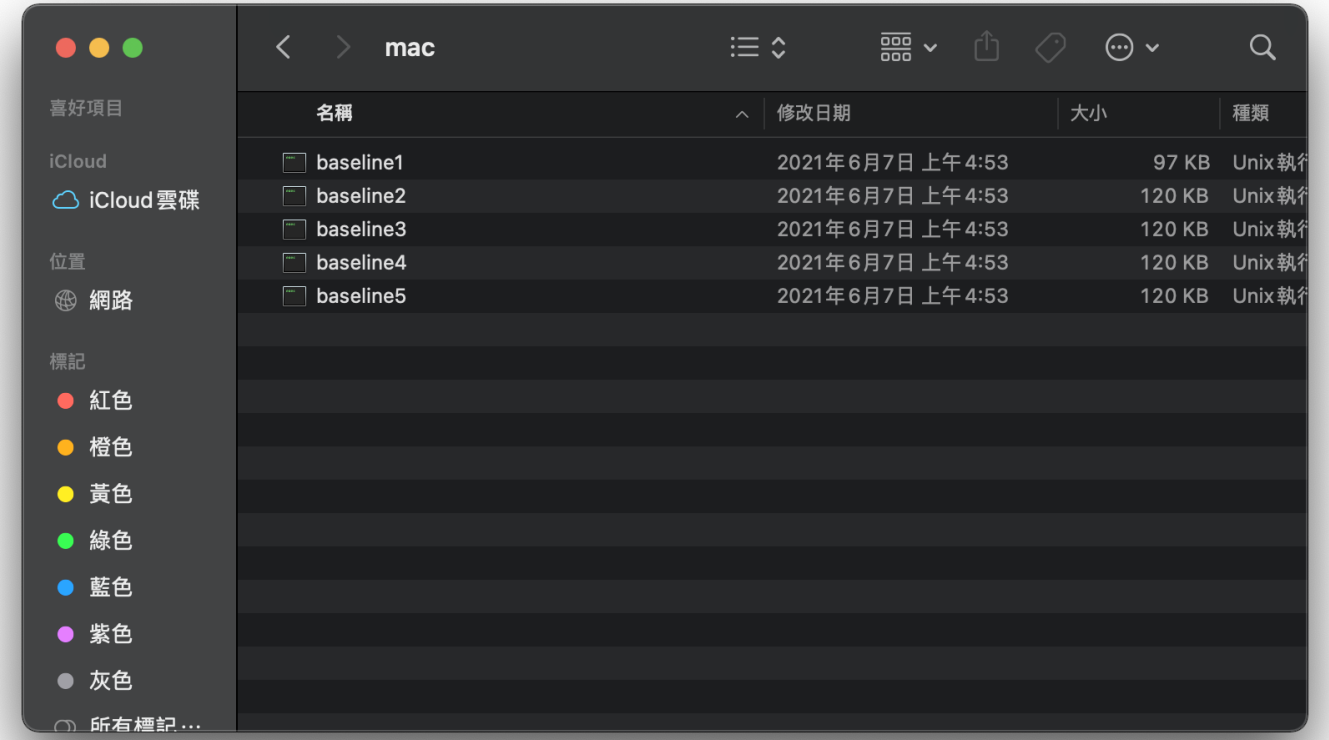
Change directory by entering
“cd [project_path]/baseline/mac” in terminal



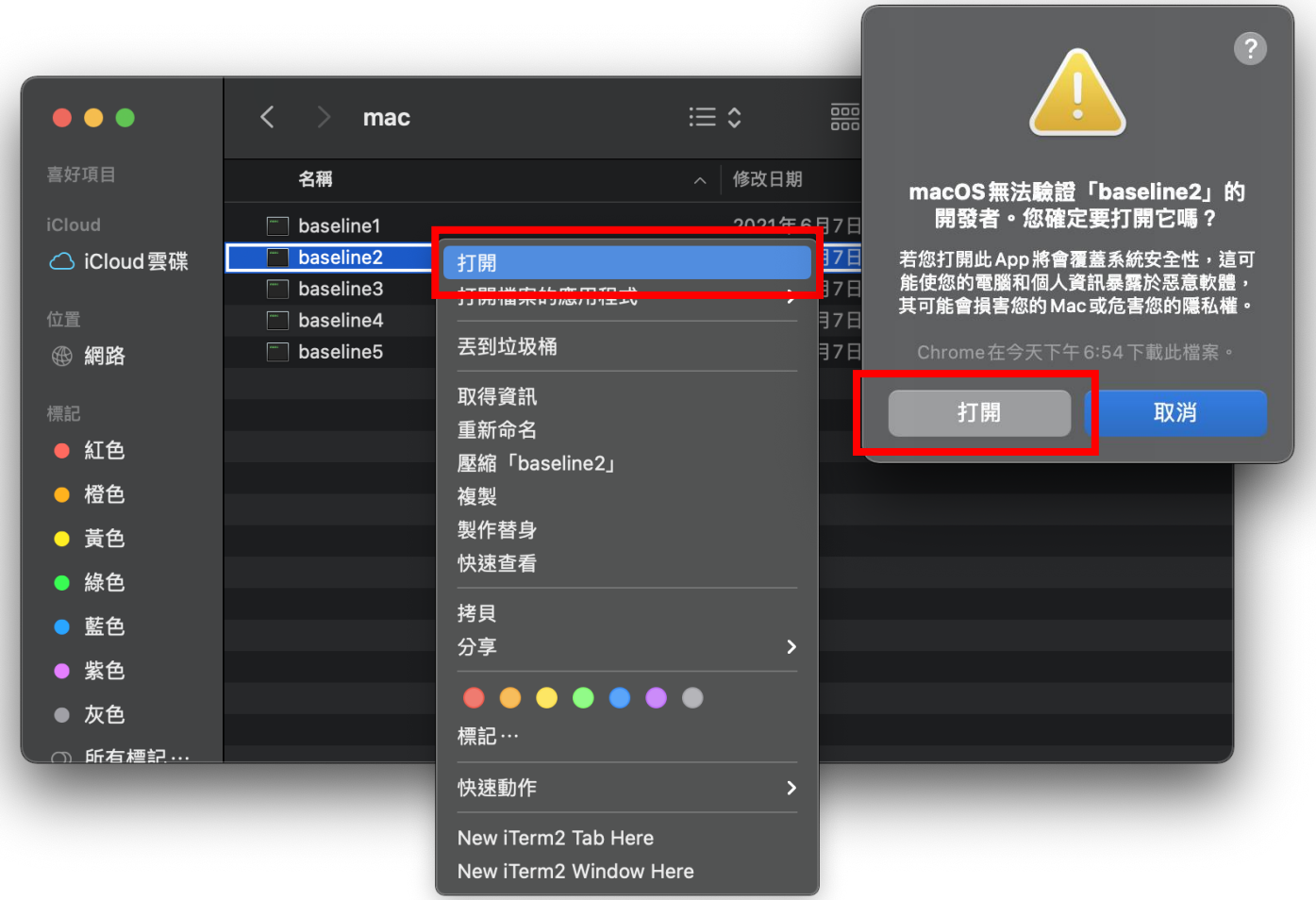
Type **“chmod u+x *”** in terminal to enable execution permission



Open “**[project_path]/baseline/mac**” in Finder



For all baselines, right click on the file and click “open”, then click “open” on the pop-up window



For Mac Users

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2. Install Coreutils
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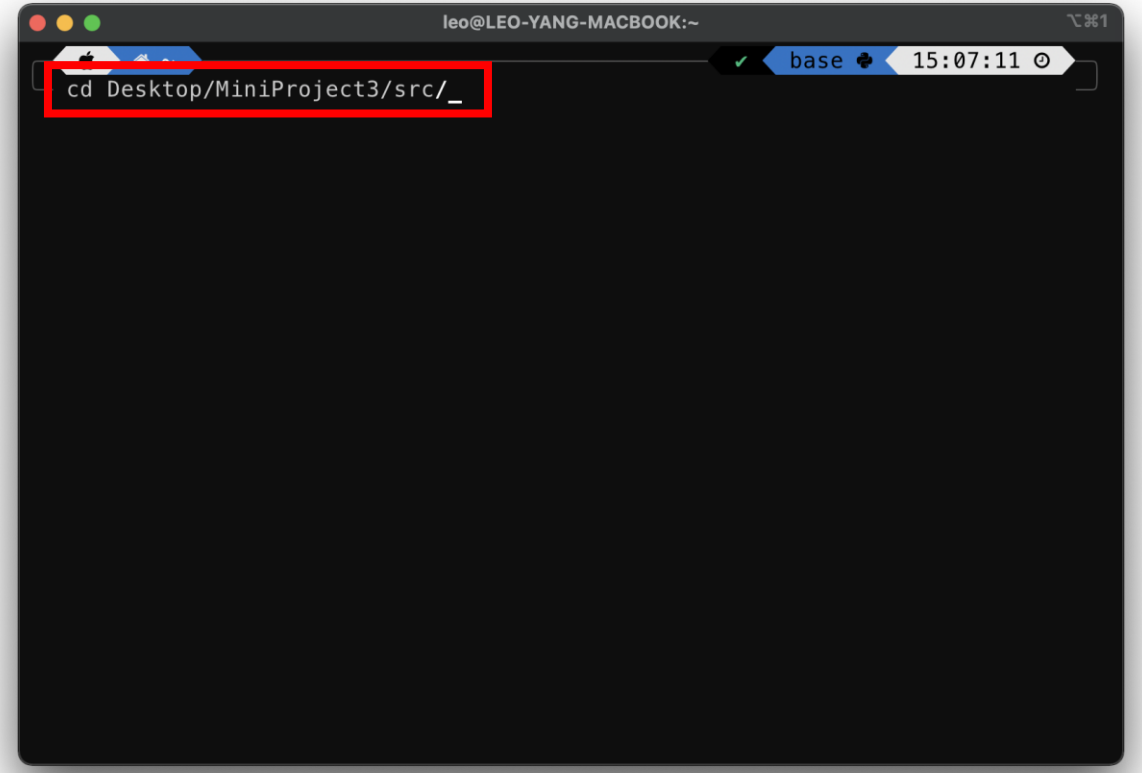
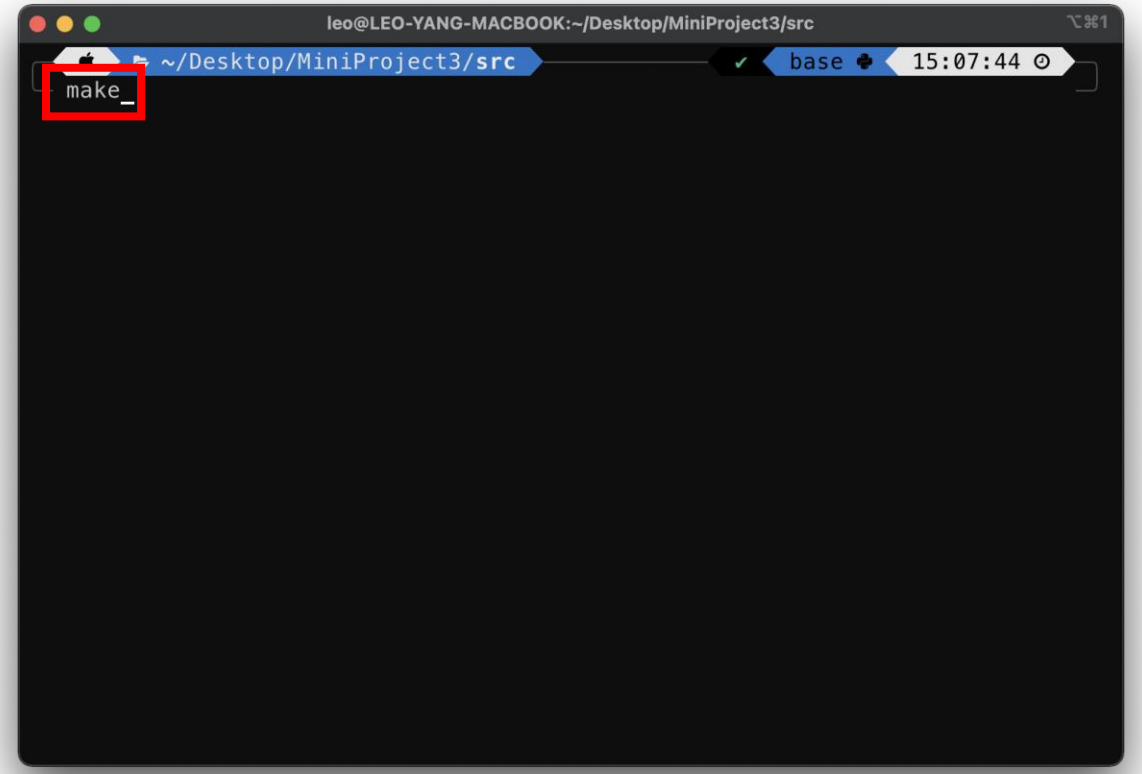
5. Execute your code

Change directory by entering **“cd [project_path]/src”** in terminal



Type **“make”** to compile your code



For Mac Users

1. Install Homebrew
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3. Modify file permissions
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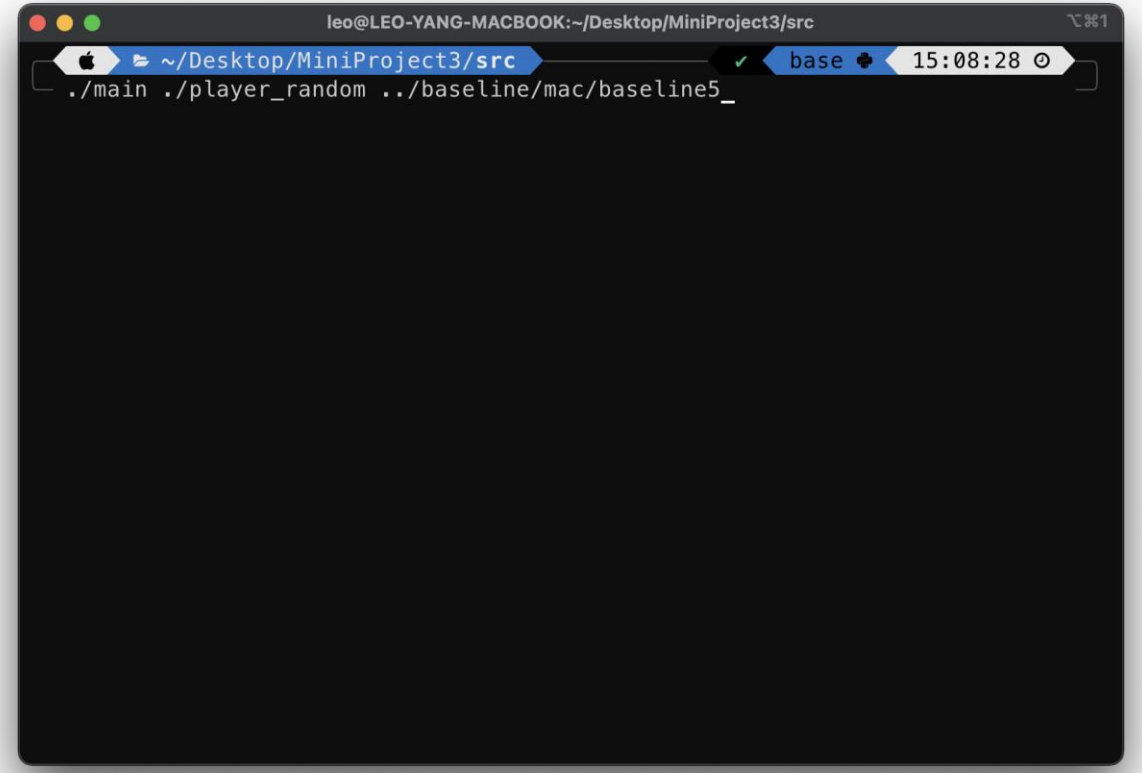
5. Execute your code

Type **“./main ./[AI1] ./[AI2]”** in terminal to execute while in the “src” folder of your project



Happy Coding!