

Steps to install Gfortran for Windows using MinGW

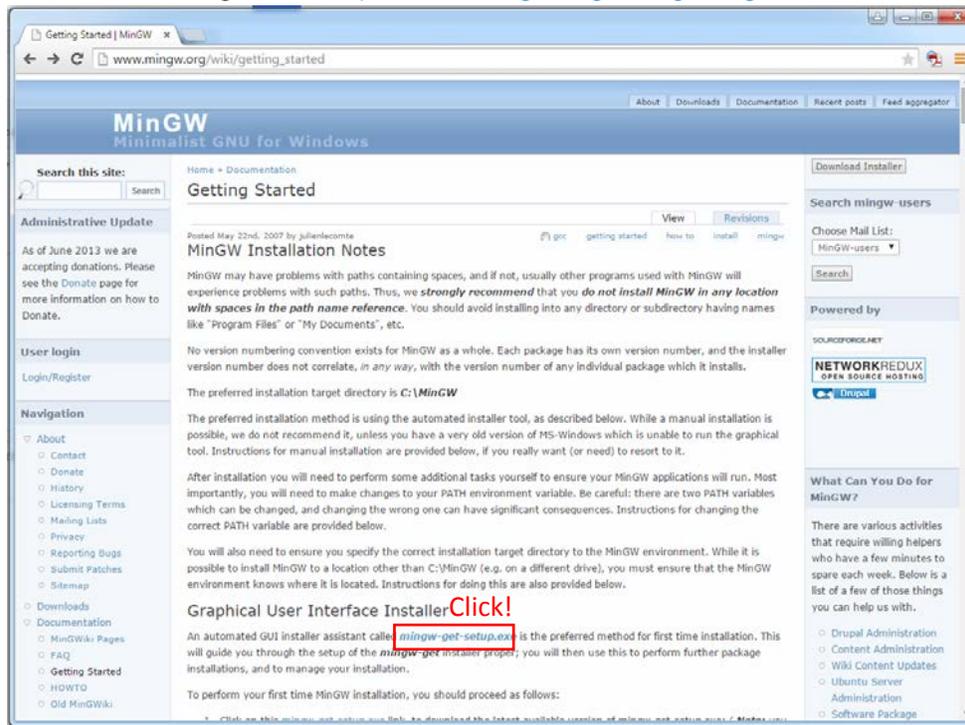
Version 1.0

5/27/15

Kyung Jae Lee (LBNL)

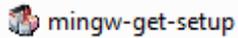
1. Download a file named 'mingw-get-setup.exe' to install MinGW at <https://sourceforge.net/projects/mingw/files/latest/download>

Or, click following link at http://www.mingw.org/wiki/getting_started

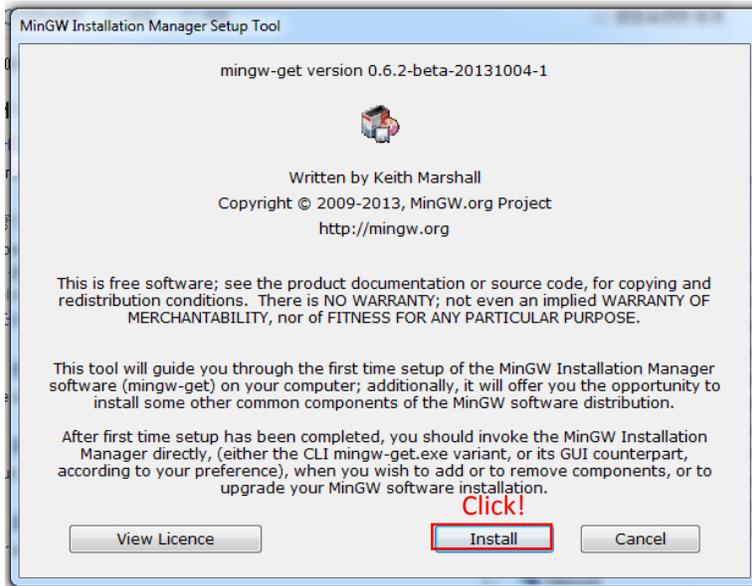


2. Execute the downloaded file 'mingw-get-setup.exe.'

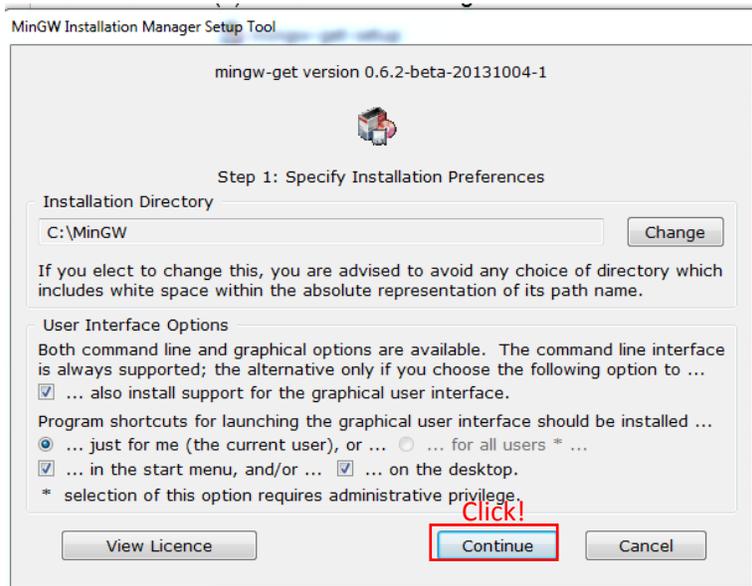
(1) Double click the following executable file.



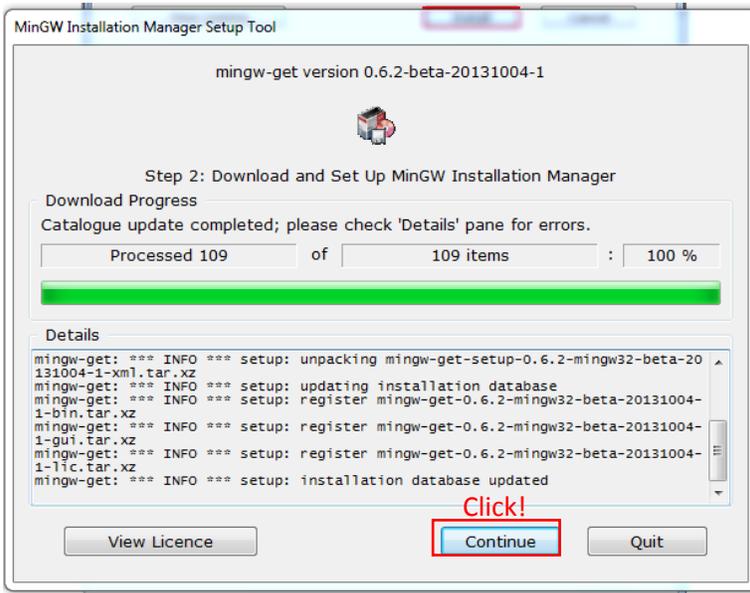
(2) MinGW Installation Manager Setup Tool should pop up. Click 'Install' button.



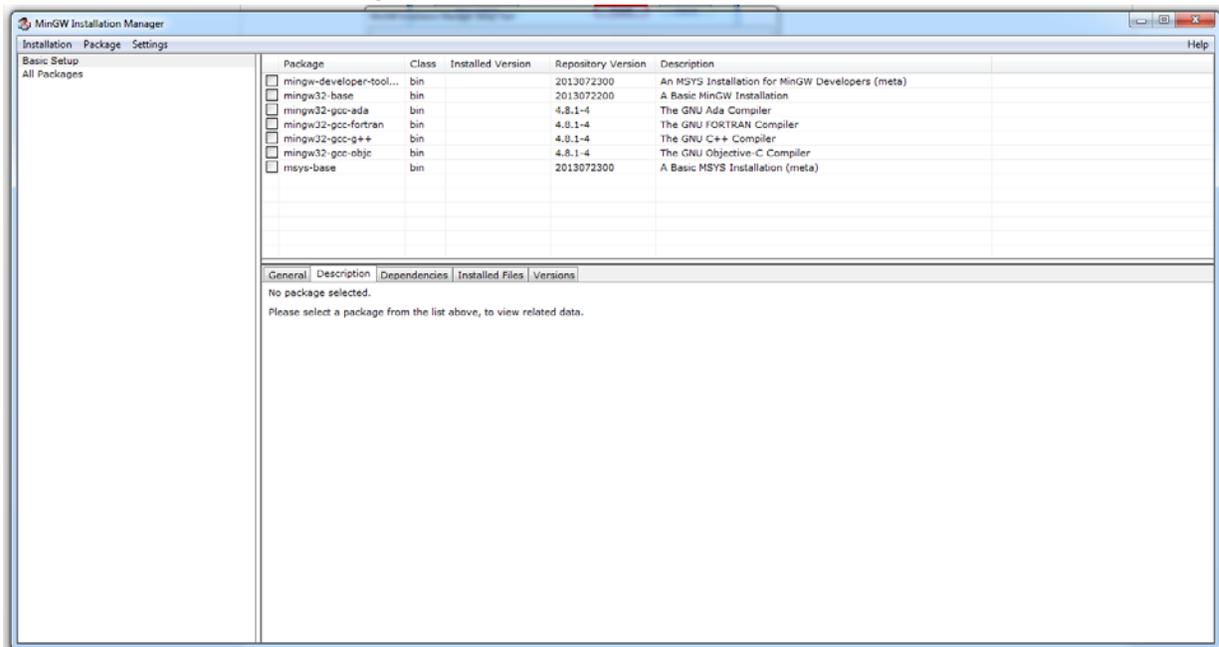
(3) Specify installation preferences



(4) Continue when installation is completed.

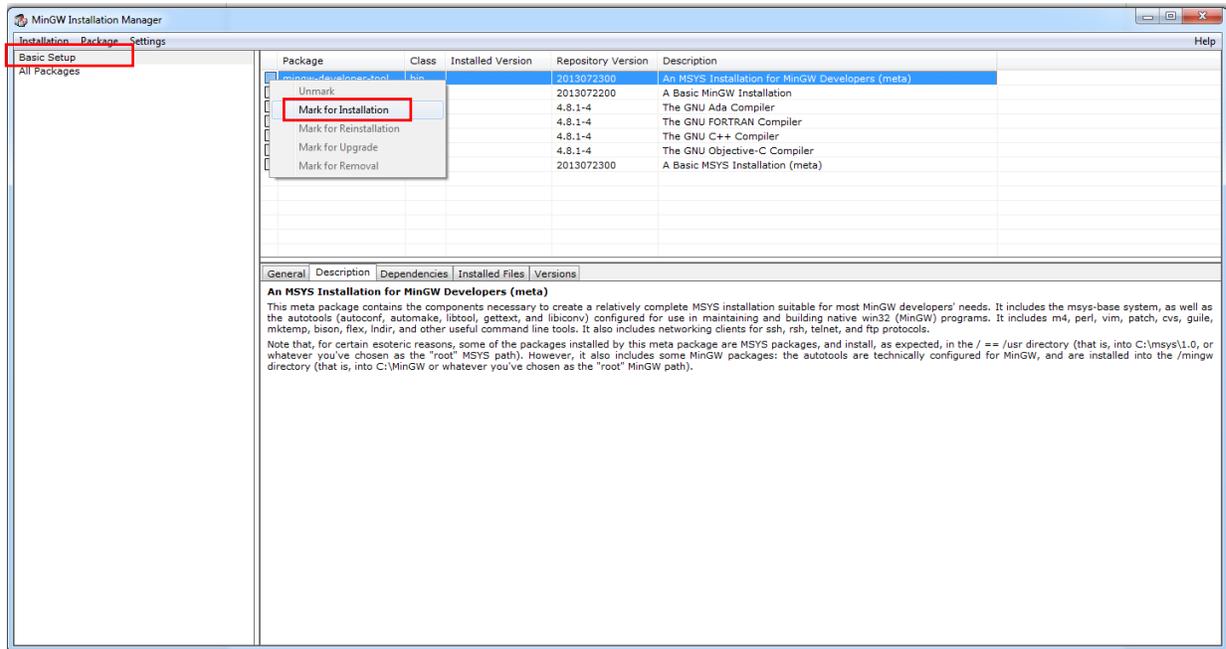


(5) MinGW installation manager will pop up.



3. Setup compiler and items in MinGW installation manager.
Right click at dialogue box – Choose 'Mark for installation' for necessary items.

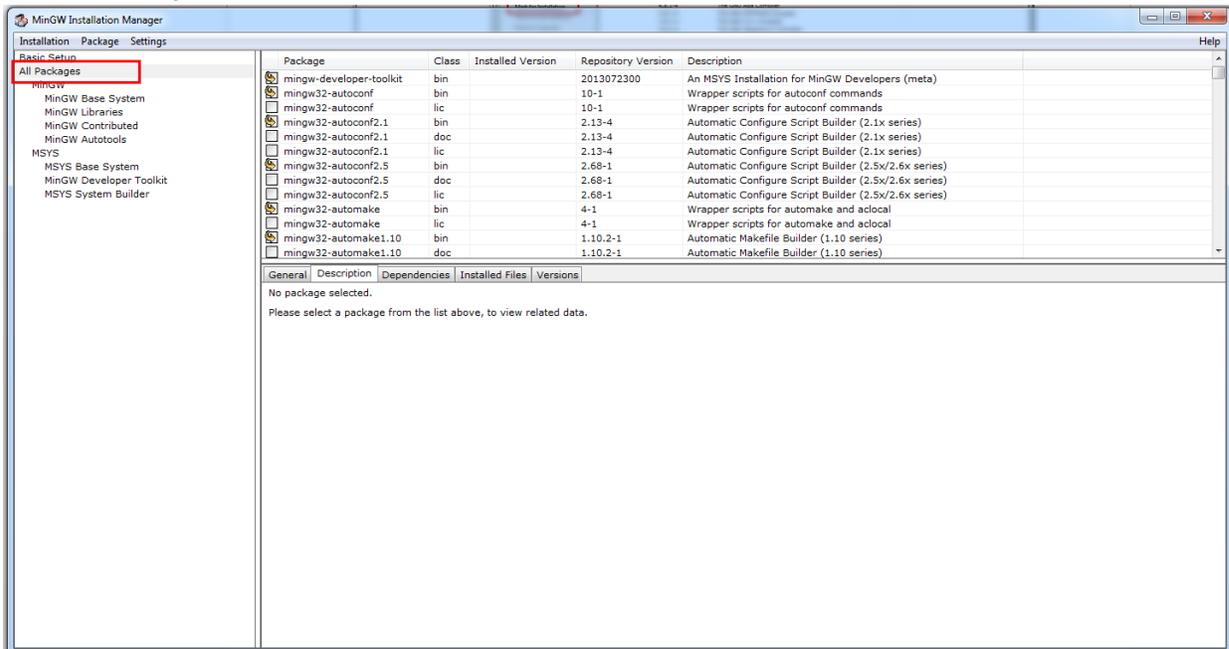
(1) Basic Setup tab



Mark for installation (check the following boxes):

- mingw-developer-toolkit (bin)
- mingw32-base (bin)
- mingw32-gcc-fortran (bin)

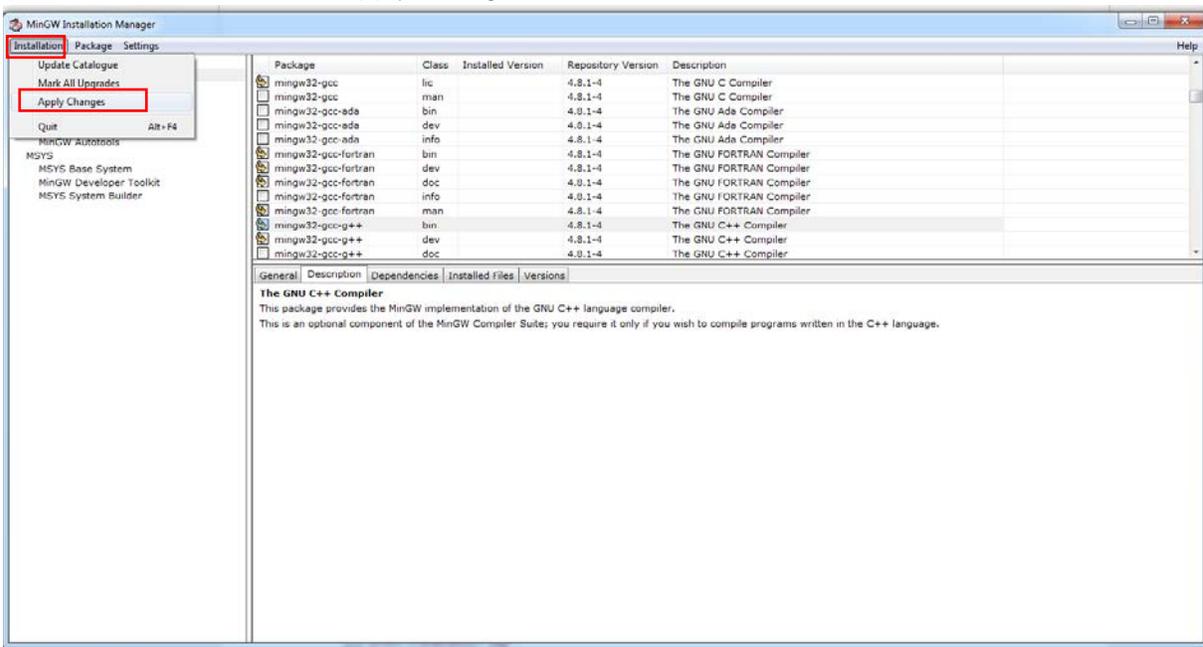
(2) All Packages tab



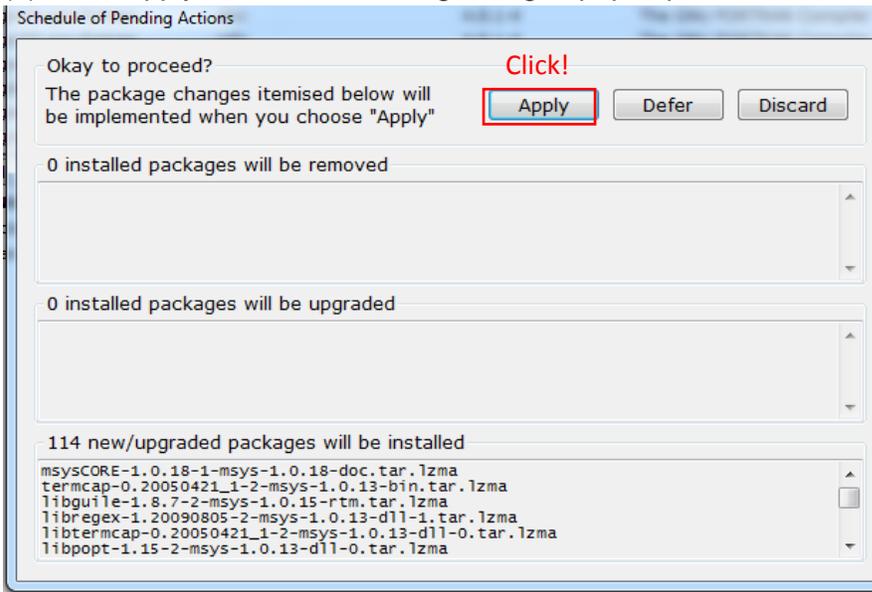
Mark for installation by checking the following boxes:

- mingw32-gcc-fortran (doc)
- mingw32-gcc-fortran (man)
- mingw32-gcc-g++ (bin)

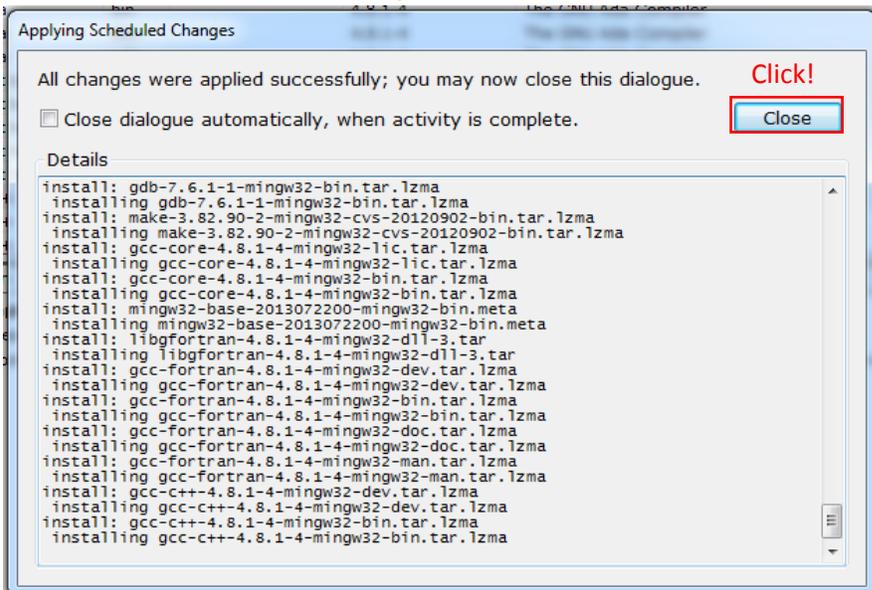
(3) Click Installation tab – Apply changes



(4) Click 'Apply' when the following dialogue pops up.



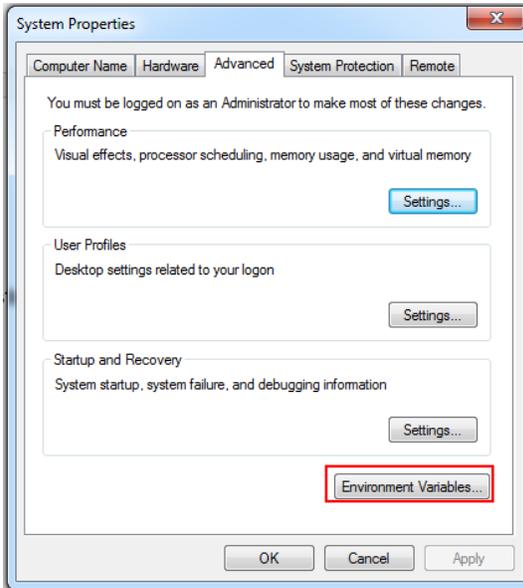
(5) Click 'Close' when all changes have been applied.



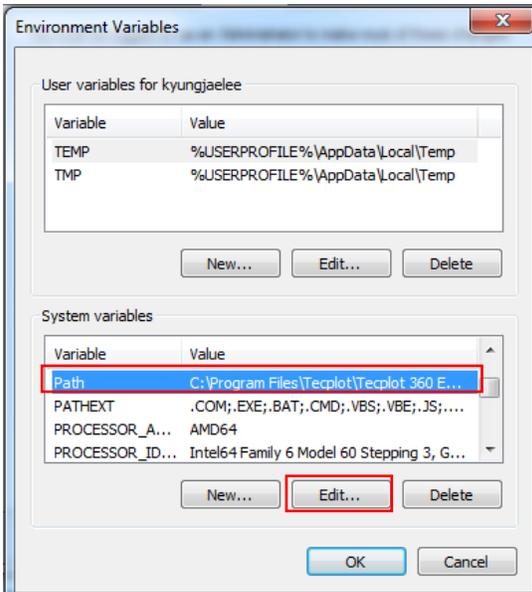
4. Setup paths.

Go to Control Panel – System and Security – System – Advanced System Settings

(1) Click ‘Environment Variables.’



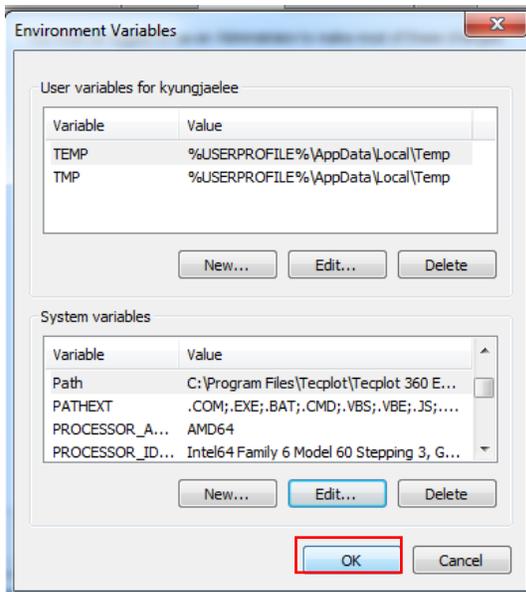
(2) Go to Path and click Edit.



(3) Add following two paths.

- C:\MinGW\bin
- C:\MinGW\msys\1.0\bin
(This second path can be different in your machine. It should point to where the msys folder is; you may need to search to find where it is.)
- Add a path where the executable file that you want to implement are located.

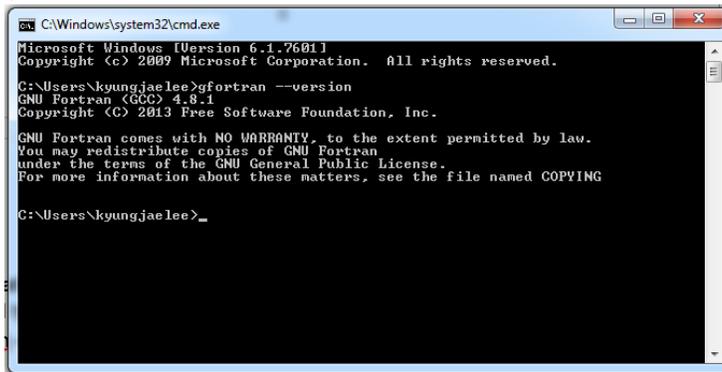
(4) After adding paths, click OK.



5. Validate installation.

Go to cmd and type the following commands.

- gfortran --version



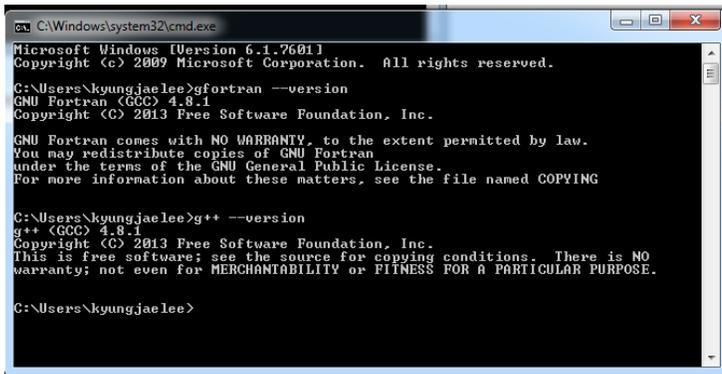
```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\kyungjaelee>gfortran --version
GNU Fortran (GCC) 4.8.1
Copyright (C) 2013 Free Software Foundation, Inc.

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C:\Users\kyungjaelee>_
```

- g++ --version



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

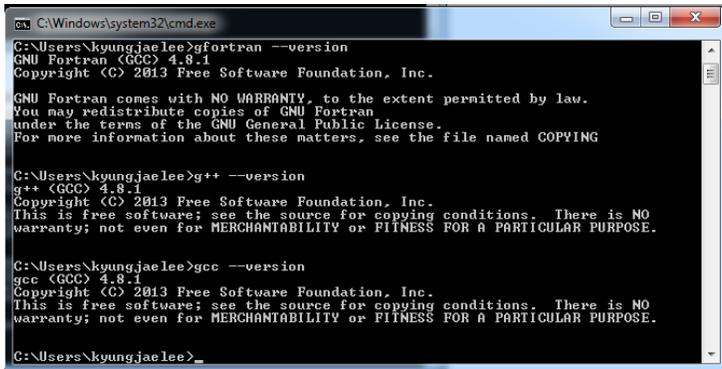
C:\Users\kyungjaelee>gfortran --version
GNU Fortran (GCC) 4.8.1
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C:\Users\kyungjaelee>g++ --version
g++ (GCC) 4.8.1
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This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

C:\Users\kyungjaelee>
```

- gcc --version



```
C:\Windows\system32\cmd.exe
C:\Users\kyungjaelee>gfortran --version
GNU Fortran (GCC) 4.8.1
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g++ (GCC) 4.8.1
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warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

C:\Users\kyungjaelee>gcc --version
gcc (GCC) 4.8.1
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warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

C:\Users\kyungjaelee>_
```

Reference: <https://www.youtube.com/watch?v=oVfAU1ziOjg>