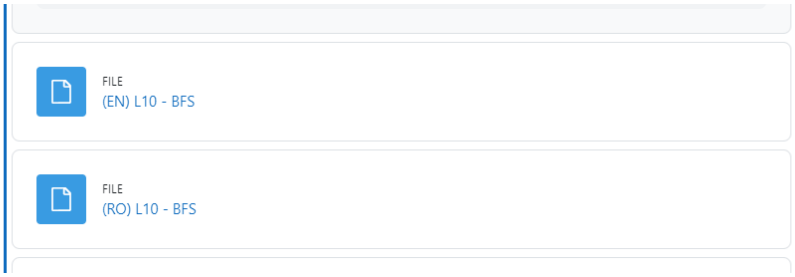
1 Assignment 9: Tutorial

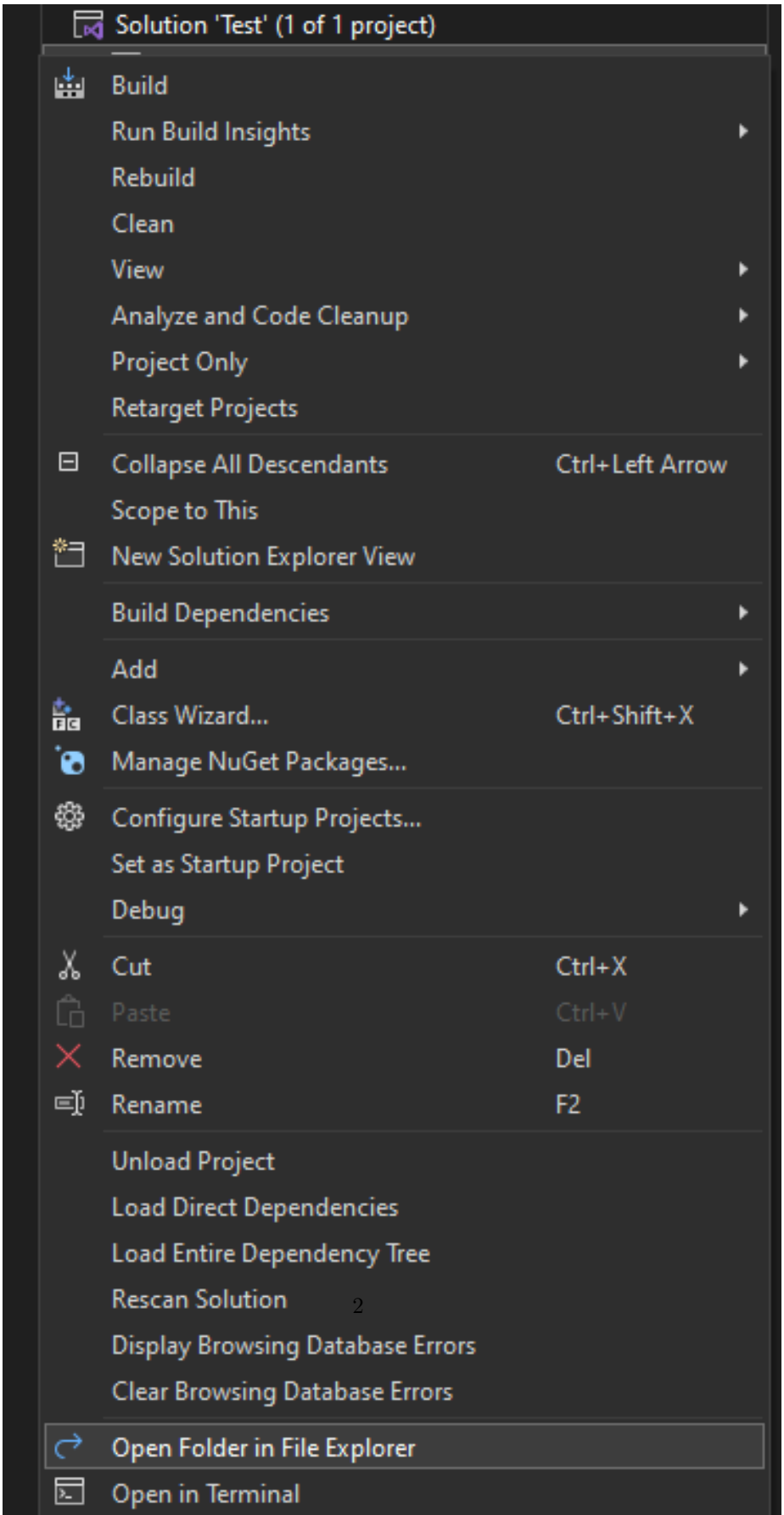
1.1 Visual Studio Project Setup

1. Go to moodle and select one of the following:

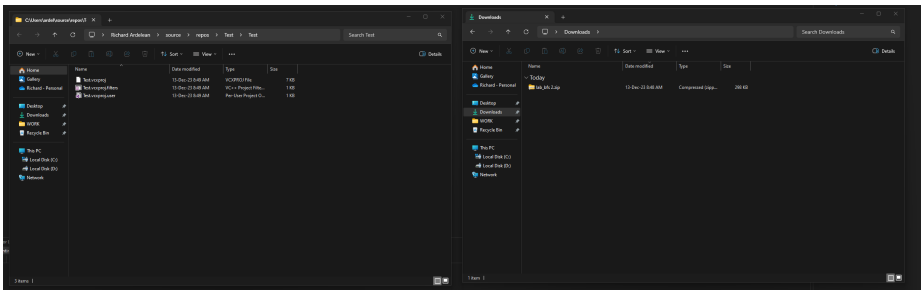


This will result in a '.zip' file being downloaded.

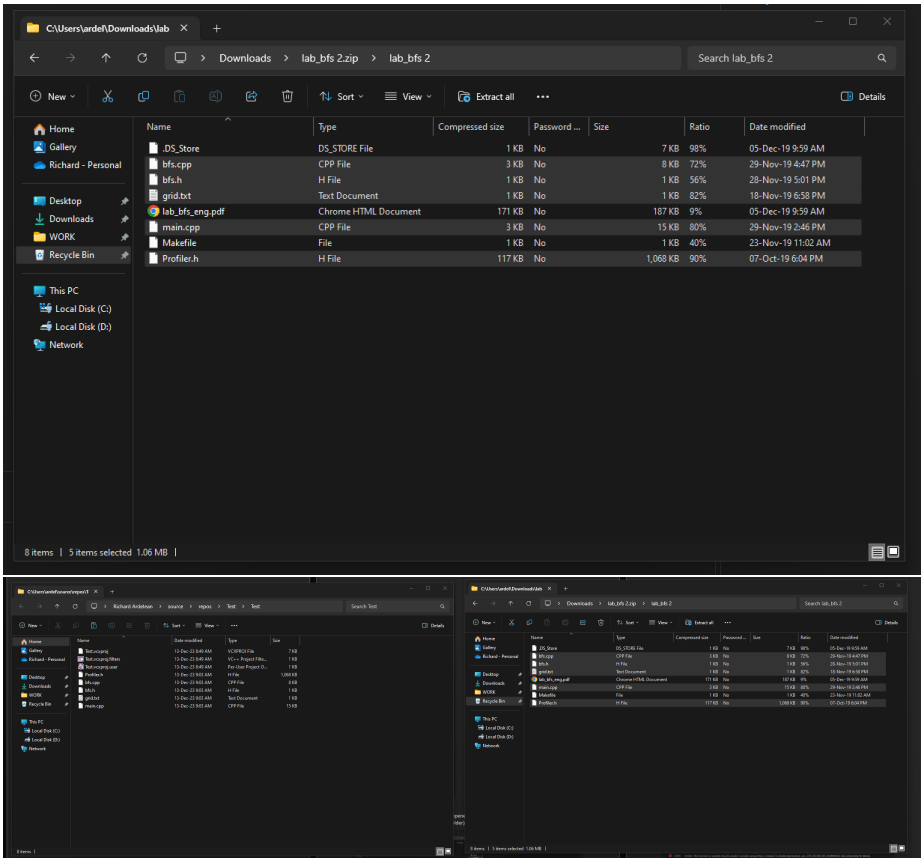
2. Create an Empty C++ Project and by right-clicking on the project (not the solution) you will be able to select 'Open Folder in File Explorer'.


Solution 'Test' (1 of 1 project)
Build
Run Build Insights
Rebuild
Clean
View
Analyze and Code Cleanup
Project Only
Retarget Projects
Collapse All Descendants Ctrl+Left Arrow
Scope to This
New Solution Explorer View
Build Dependencies
Add
Class Wizard... Ctrl+Shift+X
Manage NuGet Packages...
Configure Startup Projects...
Set as Startup Project
Debug
Cut Ctrl+X
Paste Ctrl+V
Remove Del
Rename F2
Unload Project
Load Direct Dependencies
Load Entire Dependency Tree
Rescan Solution
Display Browsing Database Errors
Clear Browsing Database Errors
Open Folder in File Explorer
Open in Terminal

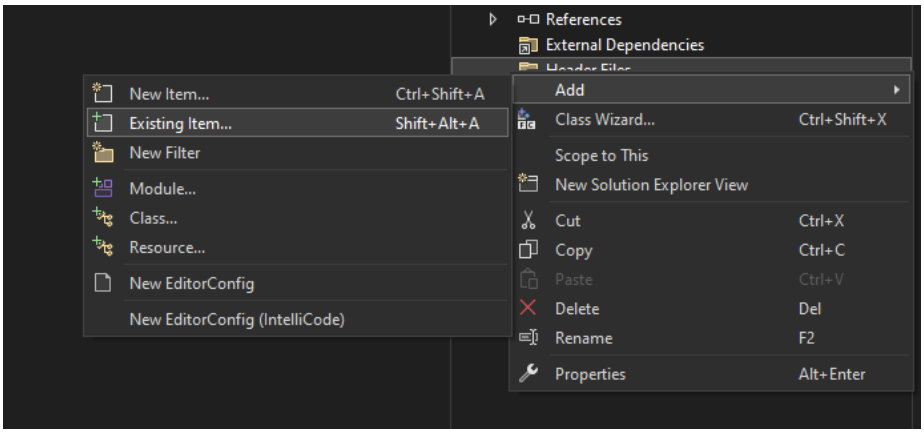
3. At this point, a 'File Explorer' window will be opened. Open another 'File Explorer' with the location of your downloads (most likely the Downloads folder).



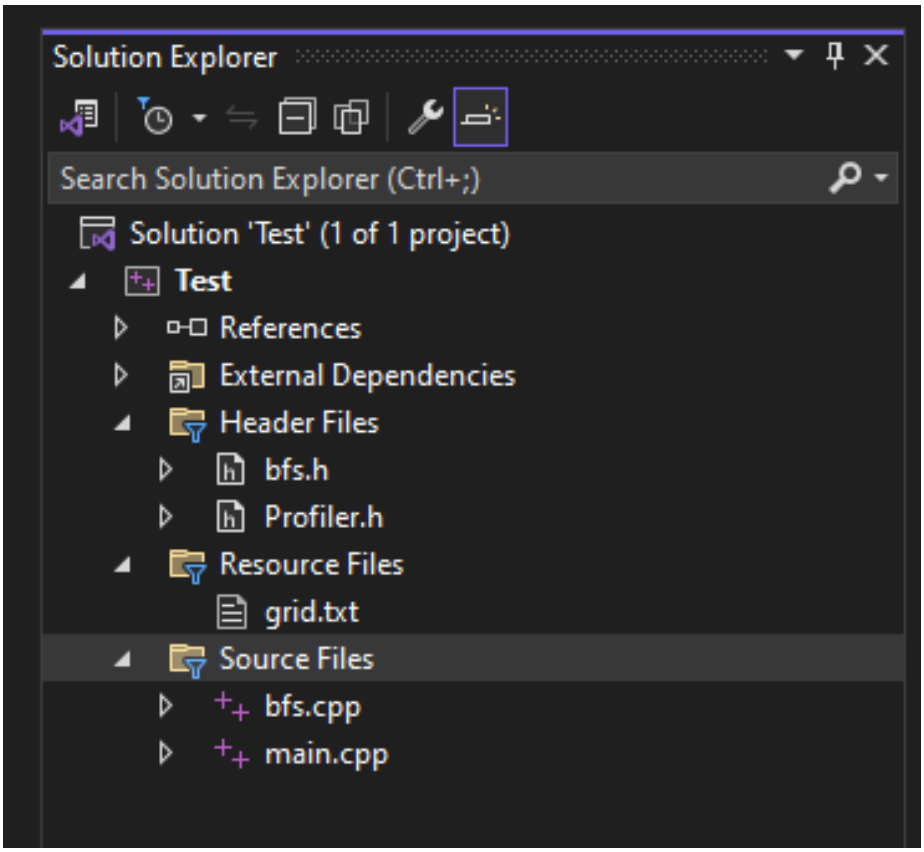
4. Open the '.zip' file and copy as shown below the files from the zip file to the folder of the project.



5. By selecting the folders from the Visual Studio Solution Explorer 'Header Files / Resources / Source Files' use the following options:

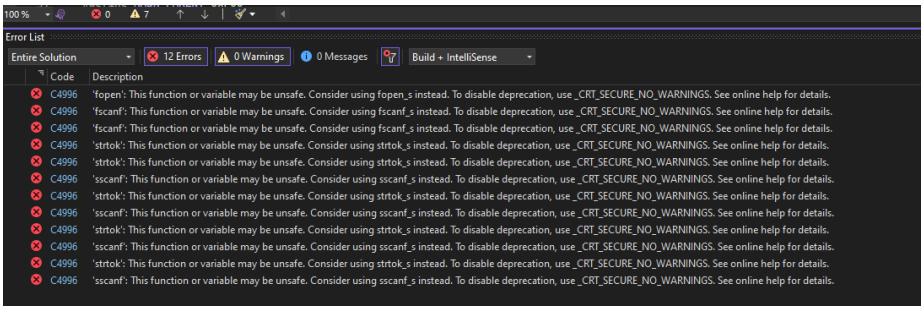


6. Such that, the following setup is accomplished:



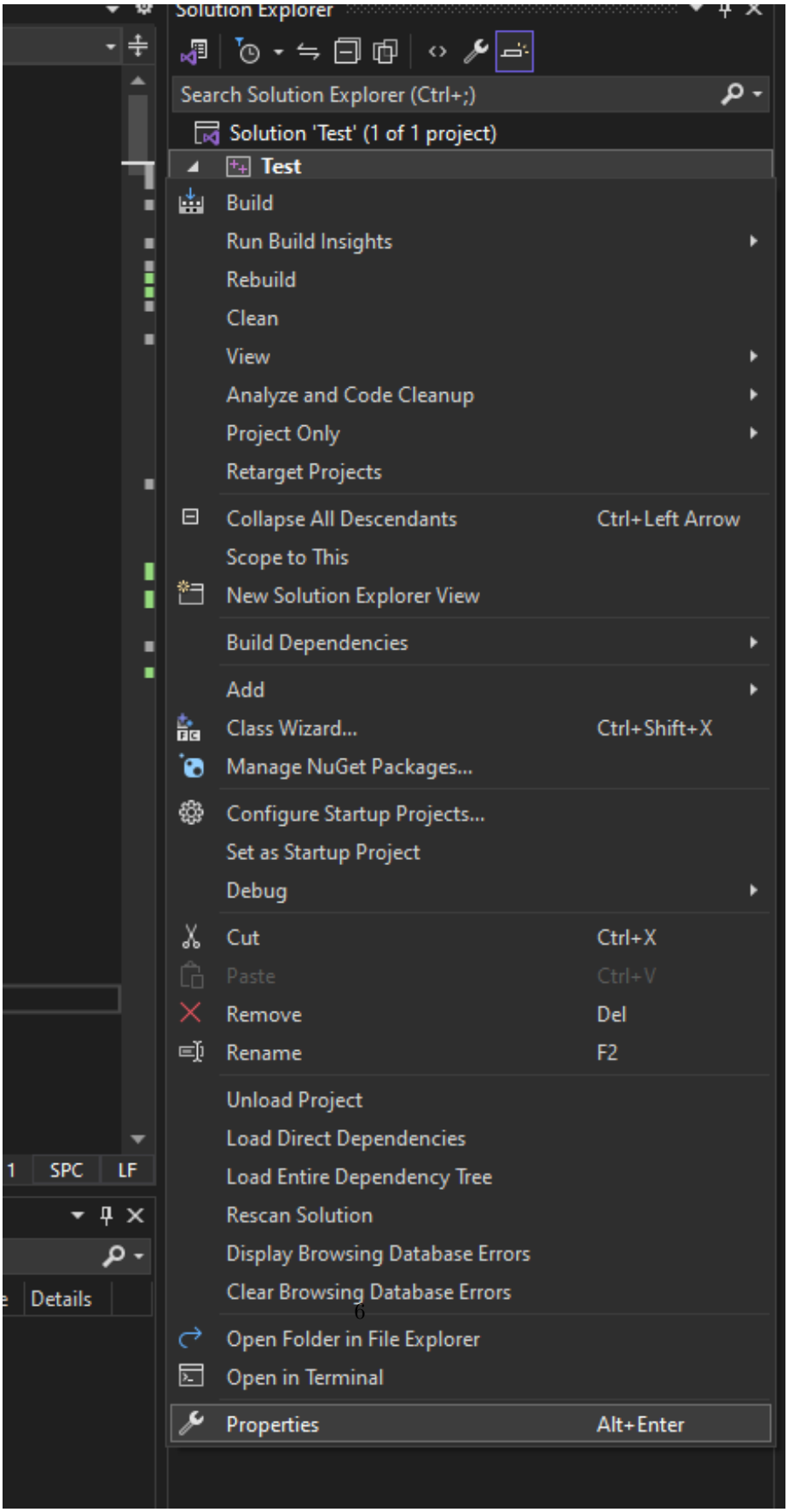
1.2 Visual Studio 'unsafe' error

Example:



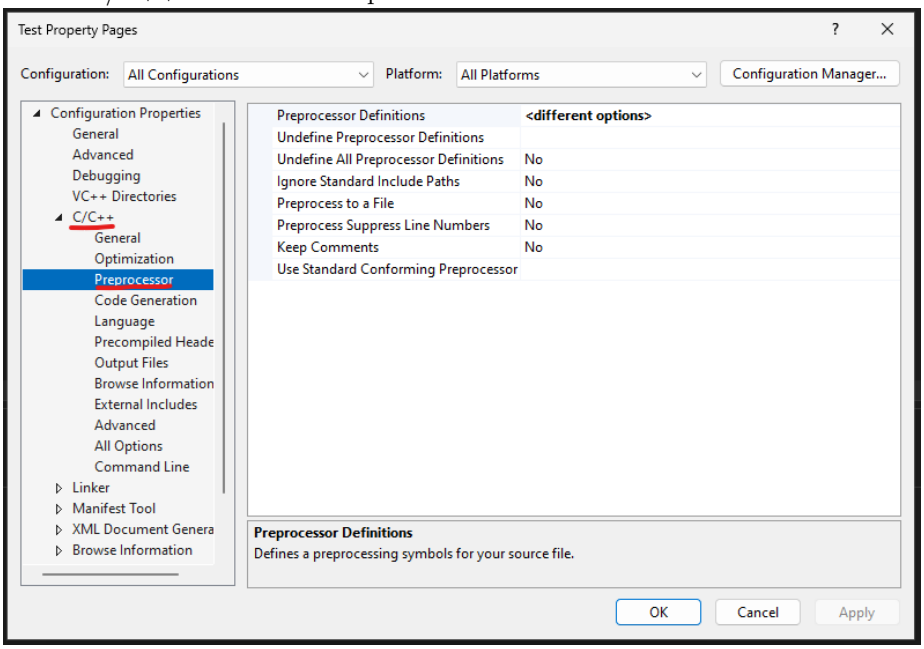
Solution:

Right-click on the project (not the Solution which will most likely have the same name) and select ‘Properties’.

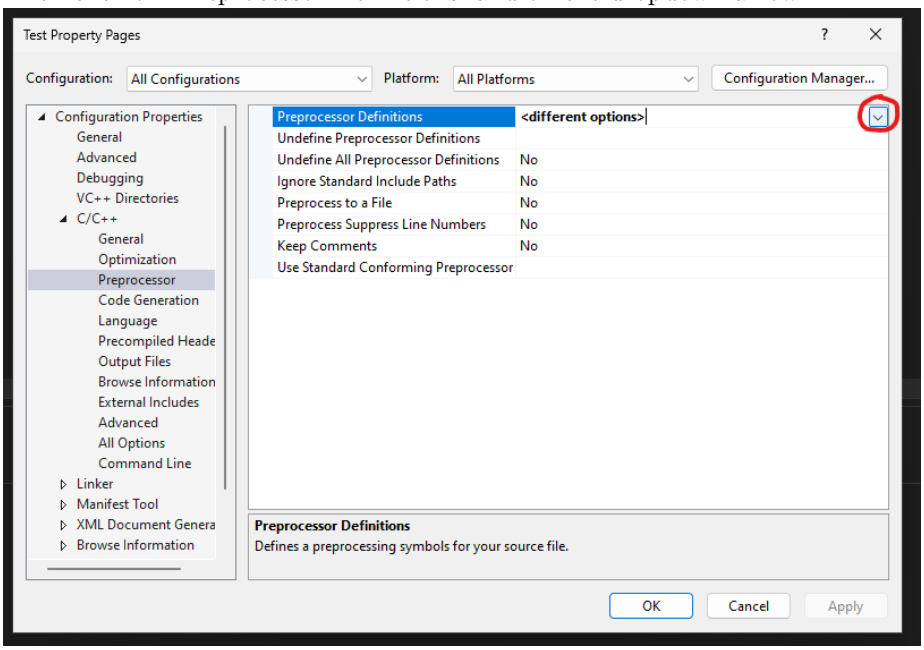

Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'Test' (1 of 1 project)
Test
Build
Run Build Insights
Rebuild
Clean
View
Analyze and Code Cleanup
Project Only
Retarget Projects
Collapse All Descendants Ctrl+Left Arrow
Scope to This
New Solution Explorer View
Build Dependencies
Add
Class Wizard... Ctrl+Shift+X
Manage NuGet Packages...
Configure Startup Projects...
Set as Startup Project
Debug
Cut Ctrl+X
Paste Ctrl+V
Remove Del
Rename F2
Unload Project
Load Direct Dependencies
Load Entire Dependency Tree
Rescan Solution
Display Browsing Database Errors
Clear Browsing Database Errors
Open Folder in File Explorer
Open in Terminal
Properties Alt+Enter
SPC
LF
Details

Update the ‘Configuration’ and ‘Platform’ in the upper side of the window to ‘All Configurations’ and ‘All Platforms’, respectively.

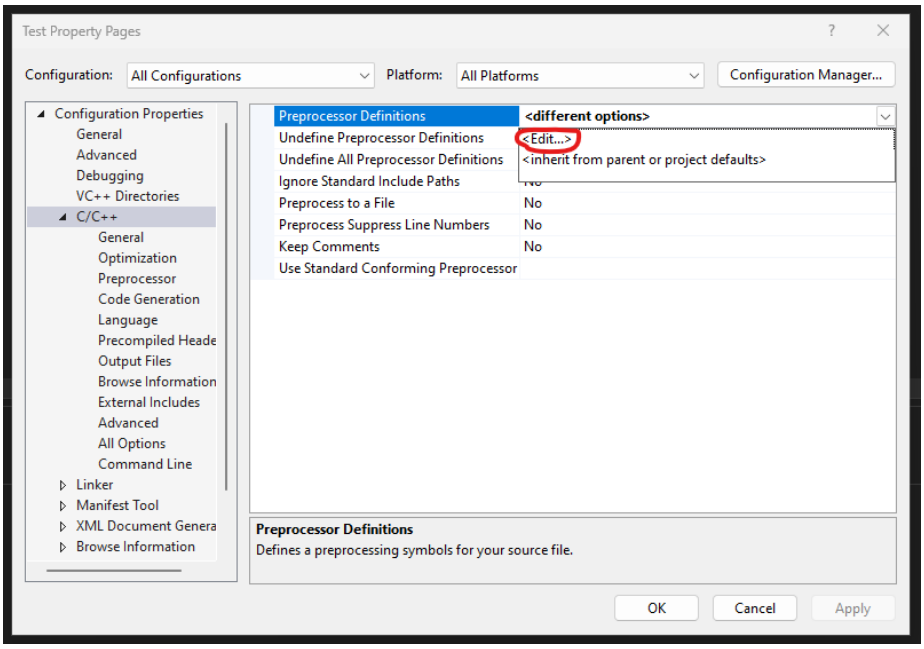
Go to ‘C/C++’ and select ‘Preprocessor’.



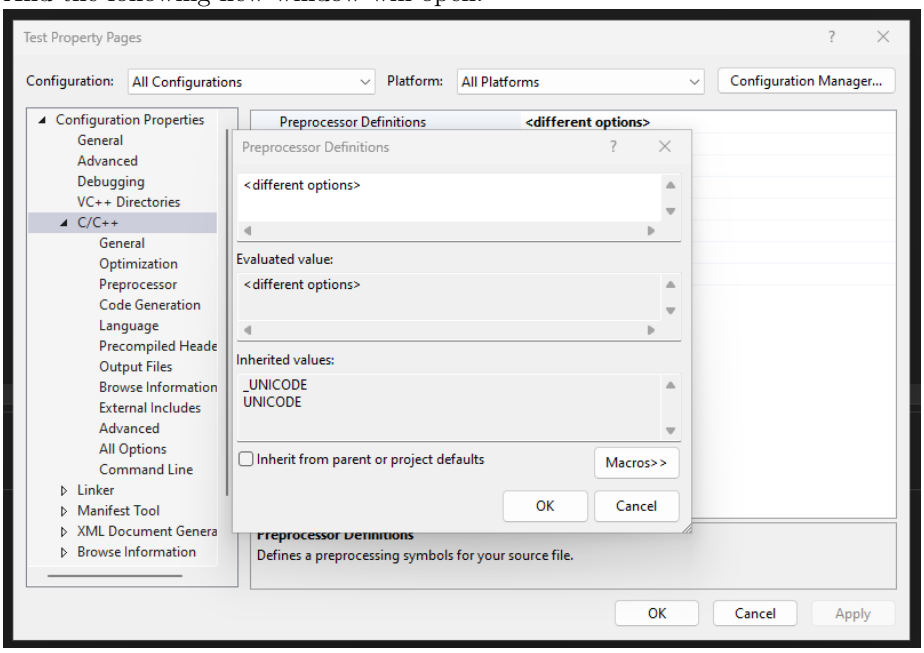
Then click on ‘Preprocessor Definitions’ and on the dropdown arrow.



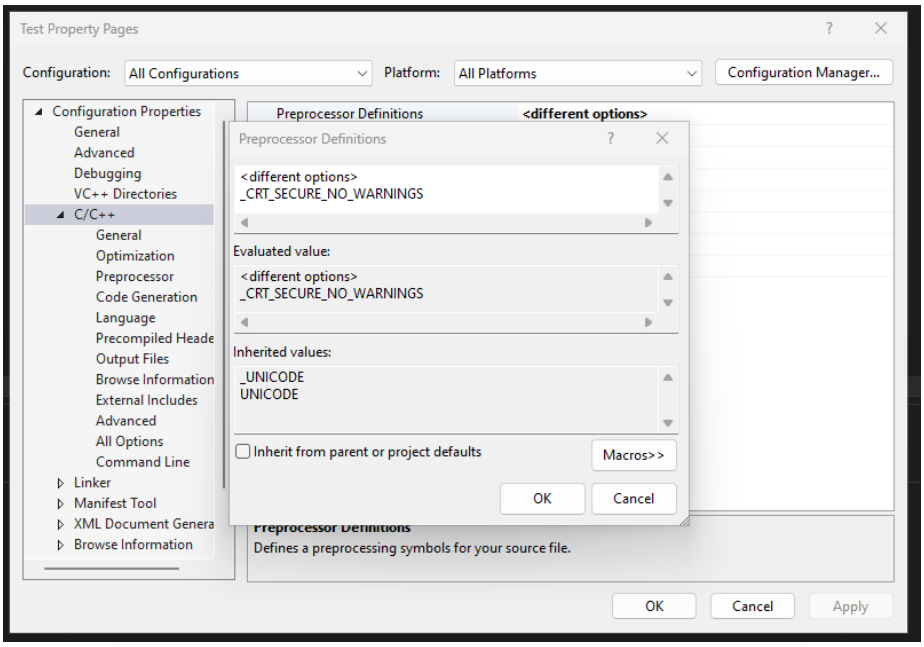
Select ‘Edit’



And the following new window will open:



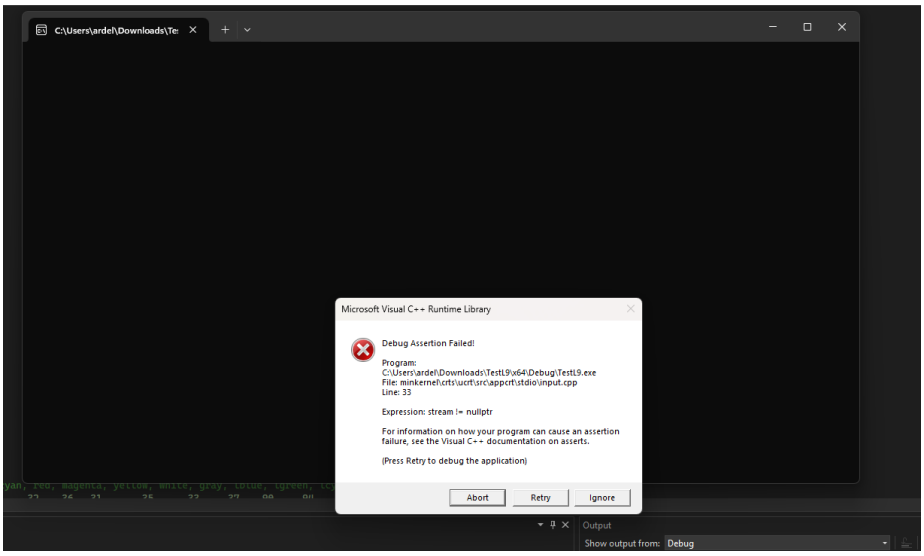
Introduce '_CRT_SECURE_NO_WARNINGS' under '<different options>' as shown below.



Click on 'OK' for all opened windows until you are returned to the main Visual Studio window of the project, and you will be able to run the project.

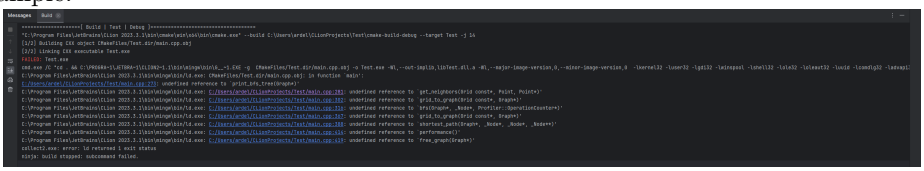
1.3 Visual Studio 'Assertion' Error

This indicates that you have not followed the tutorial. Go back to the first page and make sure that you have moved the files from the 'Downloads' folder to the 'Project' folder. You might also need to *remove* all the files from the Visual Studio IDE and *re-add* them by hand.

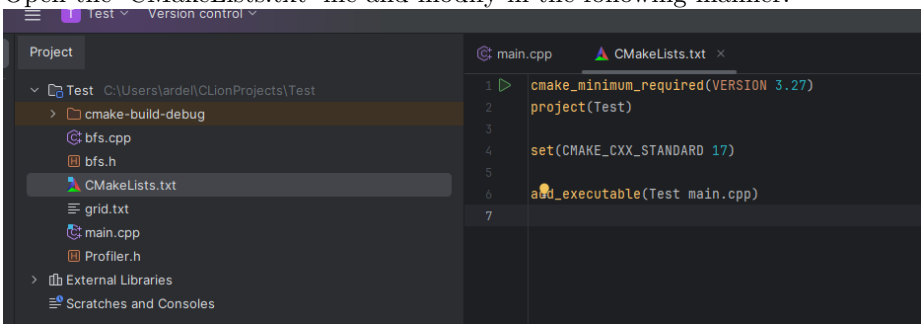


1.4 CLion undefined Error

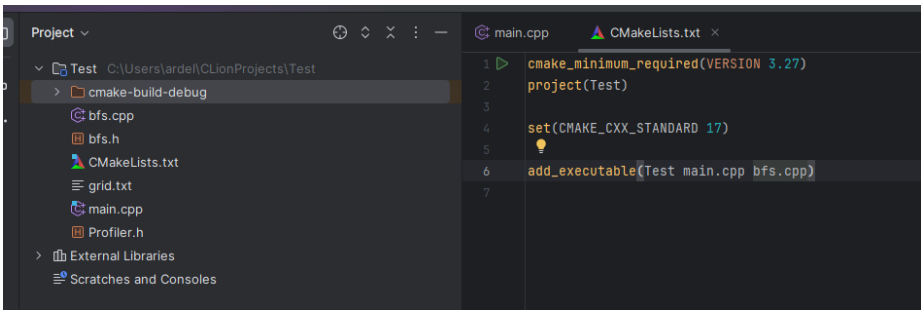
Example:



Solution:
Open the 'CMakeLists.txt' file and modify in the following manner:

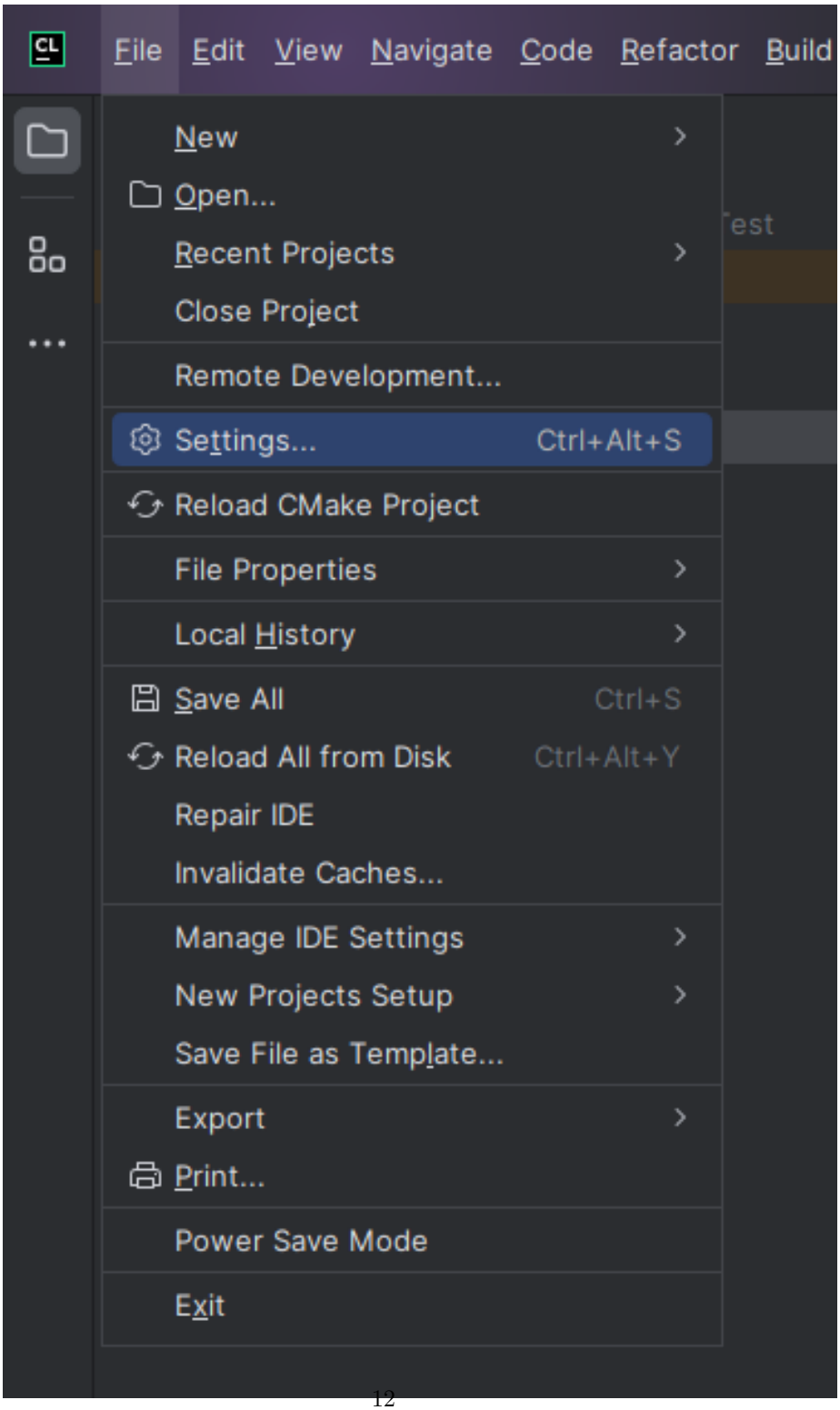


add_executable(Test main.cpp)
into
add_executable(Test main.cpp bfs.cpp)

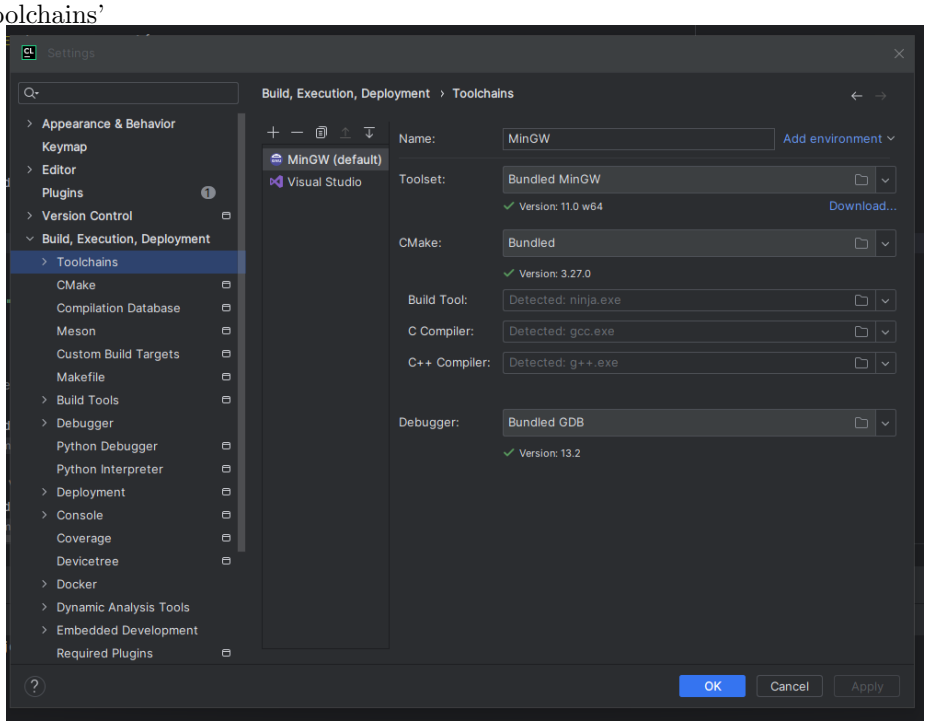


1.5 CLion Visual Studio – Option 1 (slower)

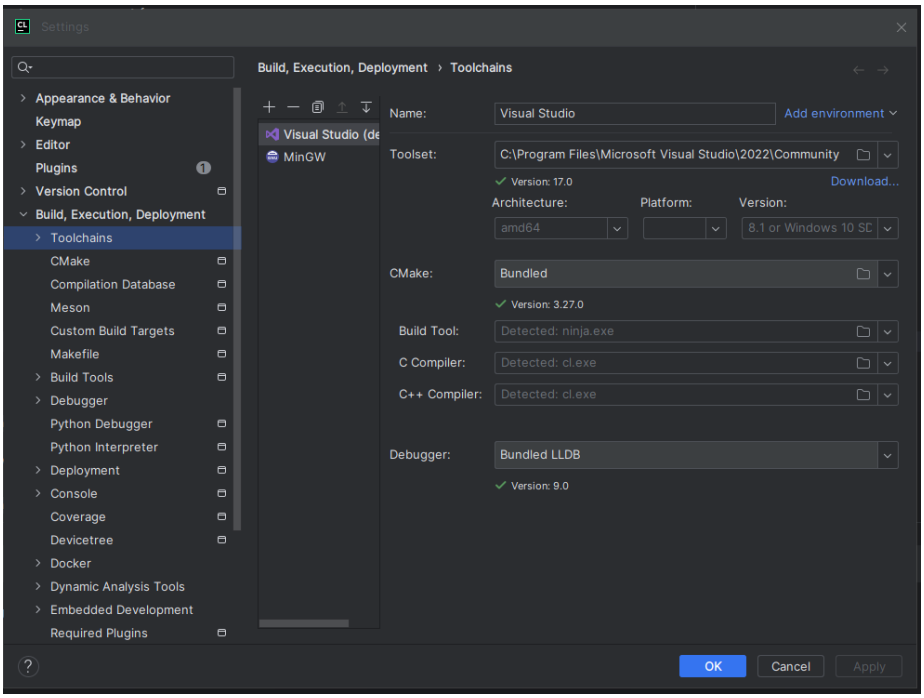
Go to File -> Settings:


File
Edit
View
Navigate
Code
Refactor
Build
New
Open...
Recent Projects
Close Project
Remote Development...
Settings... Ctrl+Alt+S
Reload CMake Project
File Properties
Local History
Save All Ctrl+S
Reload All from Disk Ctrl+Alt+Y
Repair IDE
Invalidate Caches...
Manage IDE Settings
New Projects Setup
Save File as Template...
Export
Print...
Power Save Mode
Exit

In the newly opened window, go to ‘Build, Execution, Deployment’ -> ‘Toolchains’



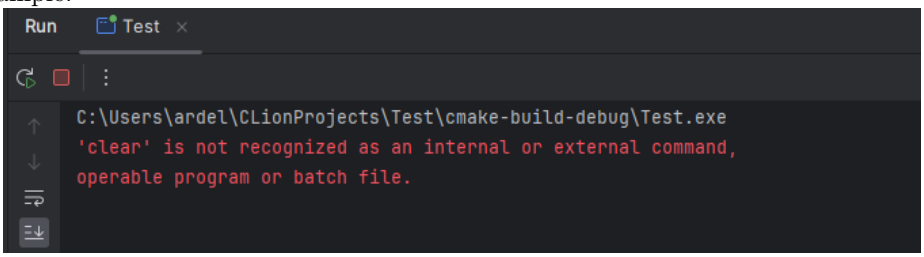
Using the arrows, move Visual Studio as default:



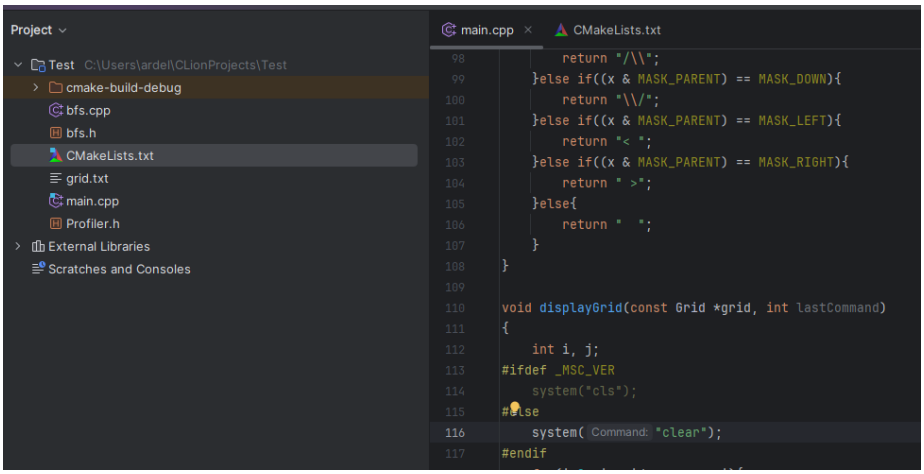
1.6 CLion MinGW – Option 2 (faster, requires external console)

1.6.1 CLion Clear error

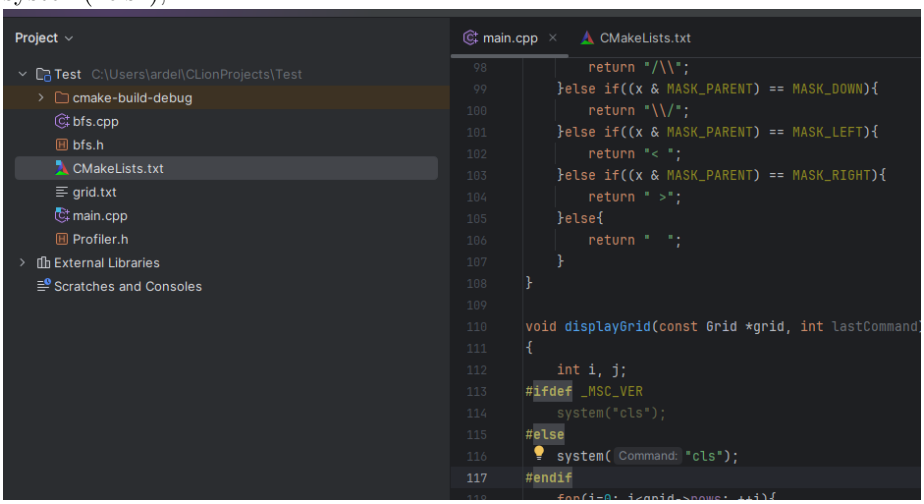
Example:



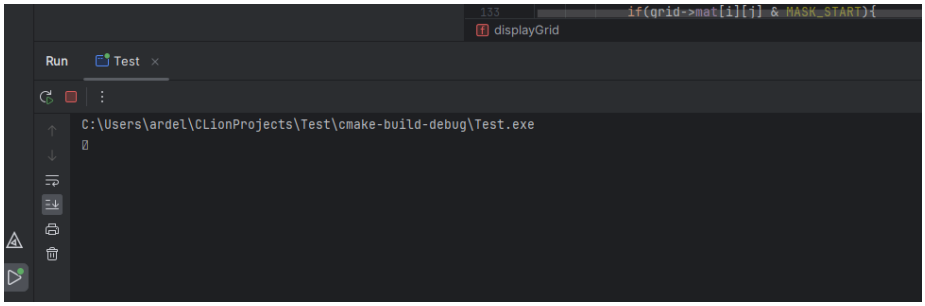
Solution:
Go to the main.cpp file and scroll to lines 113-117 in the displayGrid function.



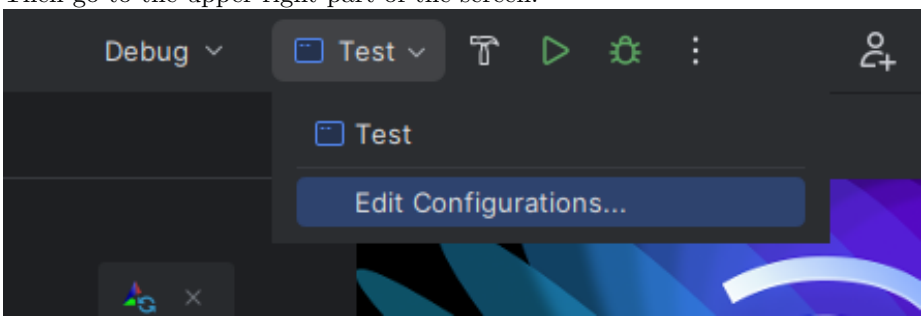
Modify in the following manner:
In the else branch from line 116
system(”clear”);
to
system(”cls”);



1.6.2 CLion not showing grid

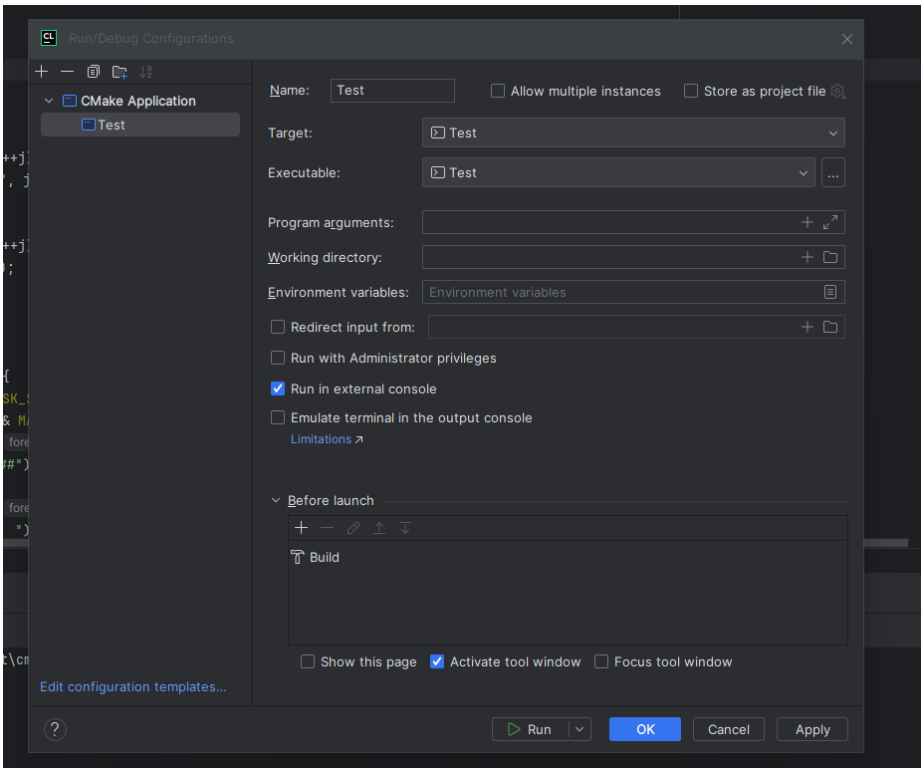


Copy the 'grid.txt' file into the 'cmake-build-debug' folder.
Then go to the upper right part of the screen:



Select 'Edit Configurations' and check the following boxes:

- Run in external console



1.7 Mac run command

g++ main.cpp bfs.cpp -std=c++11 && ./a.out