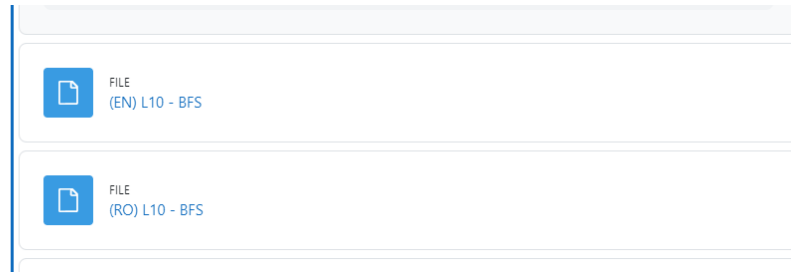# 1 Assignment 9: Tutorial

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   2

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).
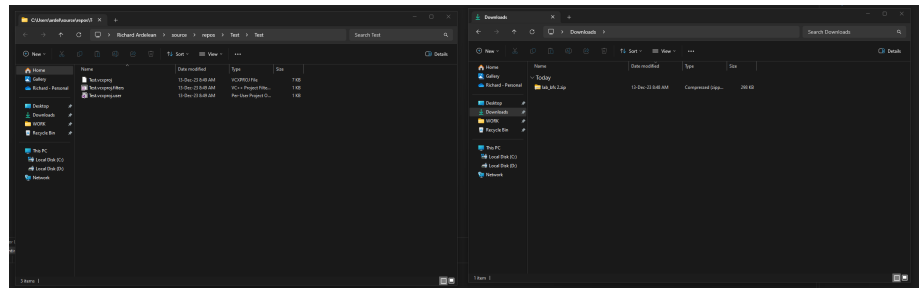
4. Open the '.zip' file and copy as shown below the files from the zip file to the folder of the project.
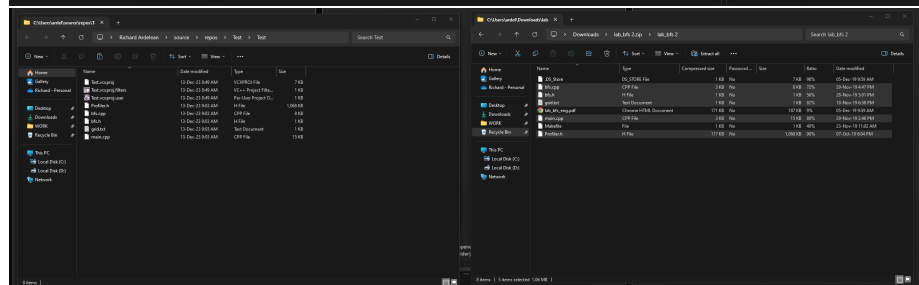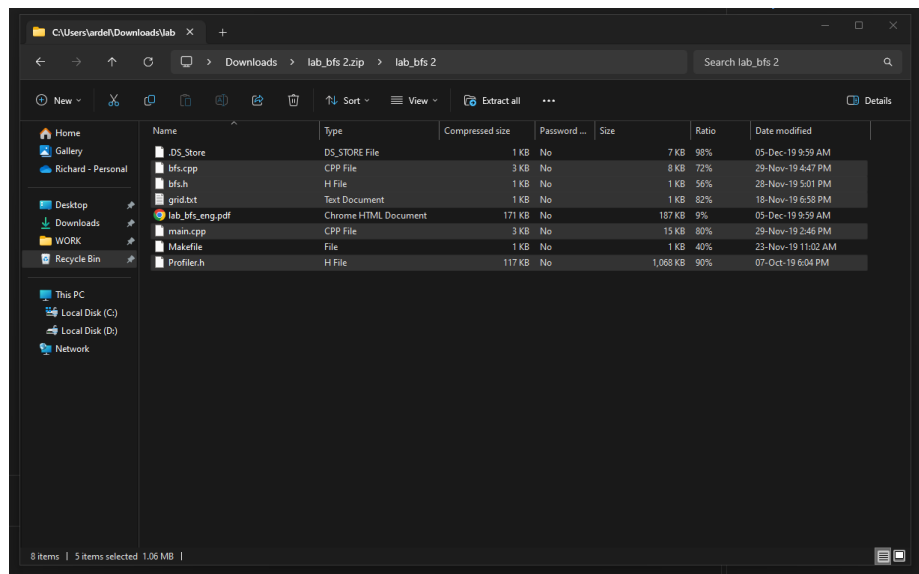
5. By selecting the folders from the Visual Studio Solution Explorer 'Header Files / Resources / Source Files' use the following options:
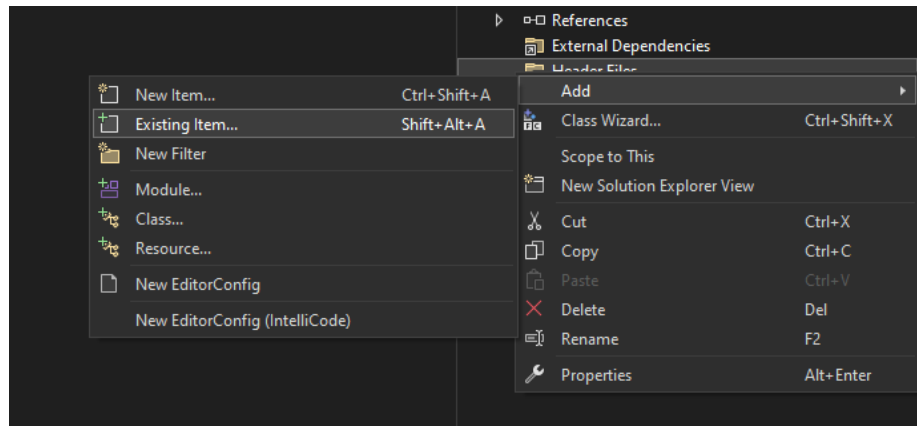
6. Such that, the following setup is accomplished:
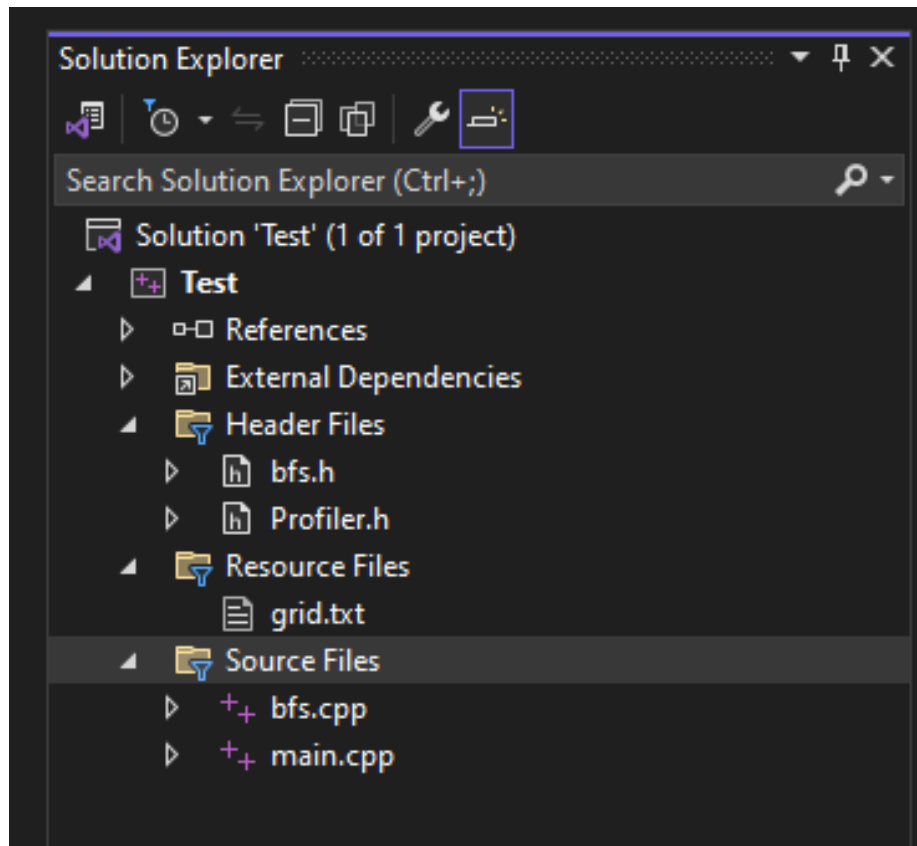
1.2   Visual Studio 'unsafe' error

Example:

Solution:

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

Search Solution Explorer (Ctrl+;)

Solution 'Test' (1 of 1 project)

Test

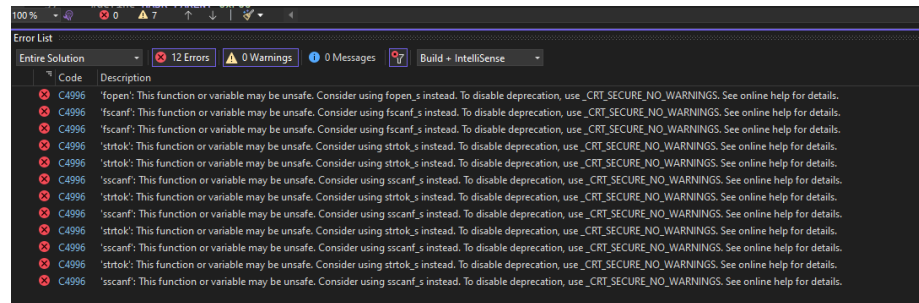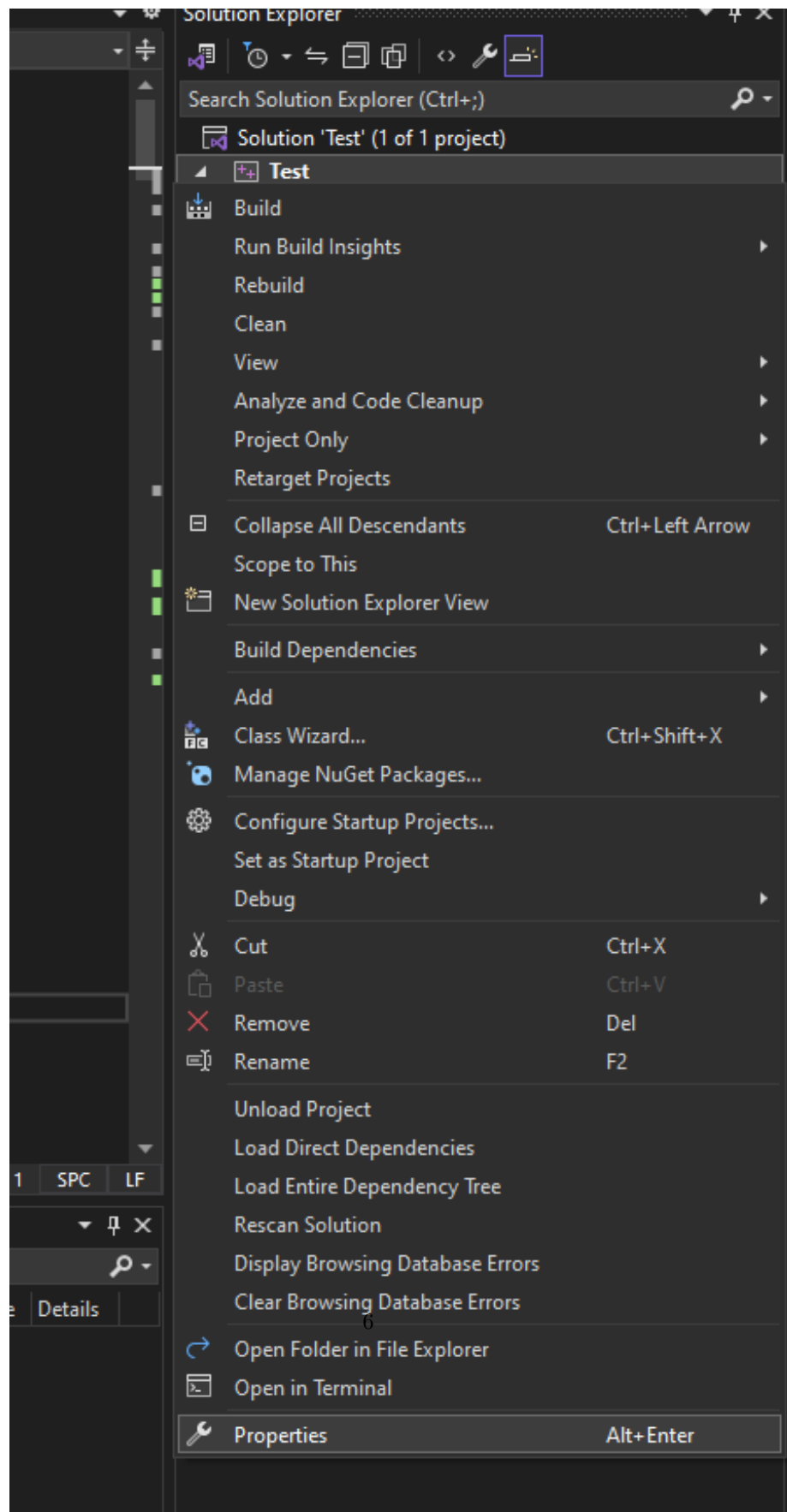|		
Build		
Run Build Insights		▶
Rebuild		
Clean		
View		▶
Analyze and Code Cleanup		▶
Project Only		▶
Retarget Projects		
Collapse All Descendants	Ctrl+Left Arrow	
Scope to This		
New Solution Explorer View		
Build Dependencies		▶
Add		▶
Class Wizard...	Ctrl+Shift+X	
Manage NuGet Packages...		
Configure 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	

6

SPC   LF

Details

Update the 'Configuration' and 'Platform' in the upper side of the window to 'All Configurations' and 'All Platforms', respectively.
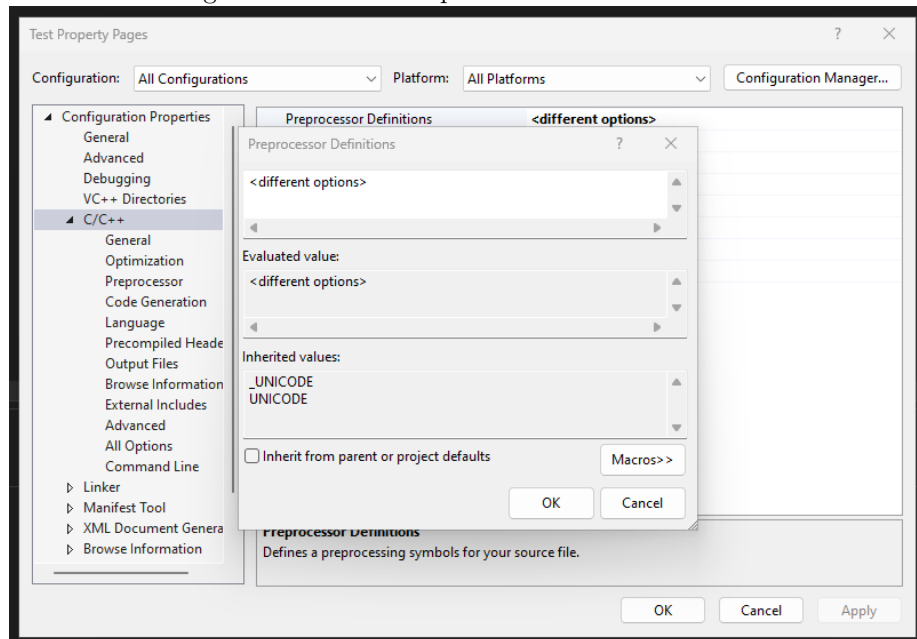Go to 'C/C++' and select 'Preprocessor'.
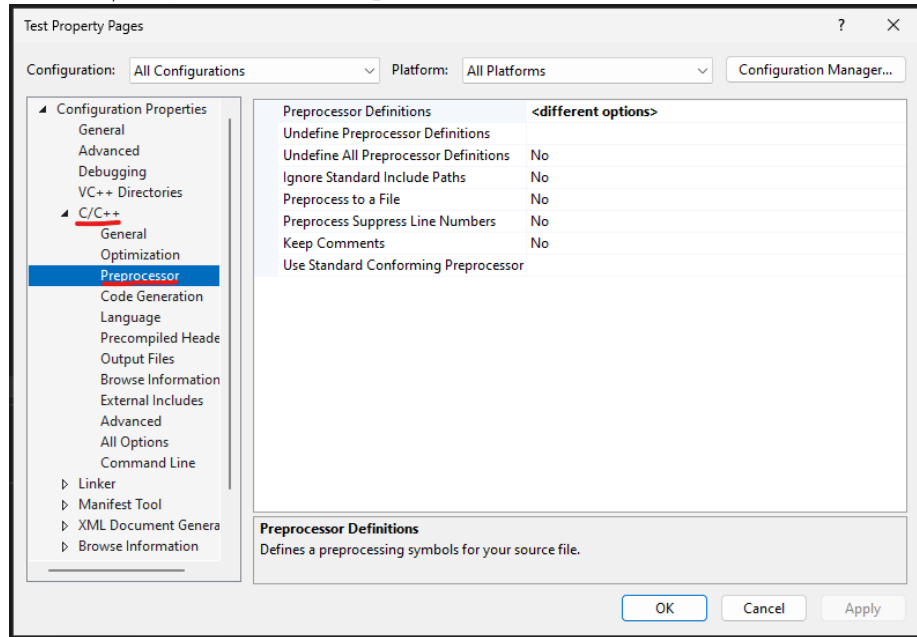
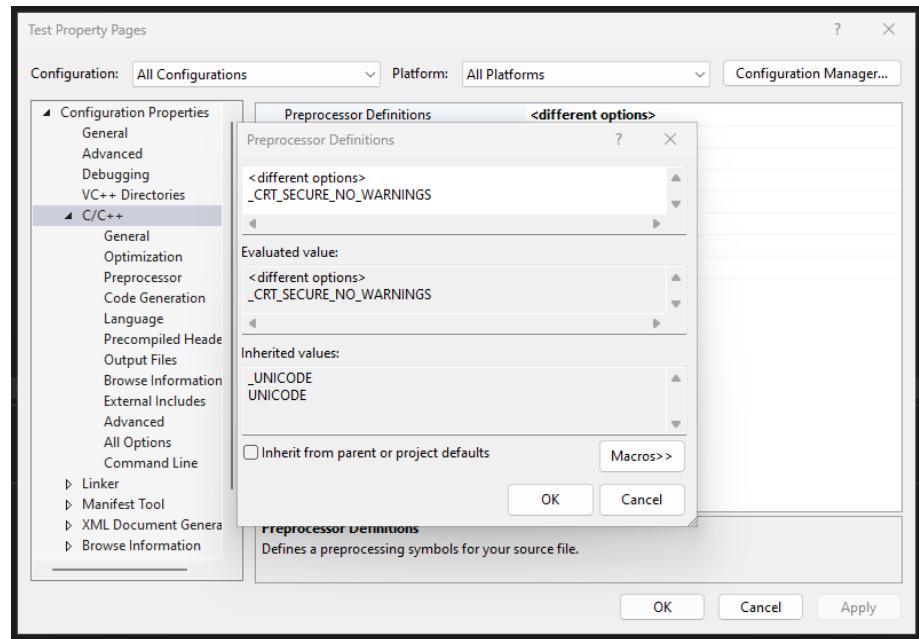Then click on 'Preprocessor Definitions' and on the dropdown arrow.
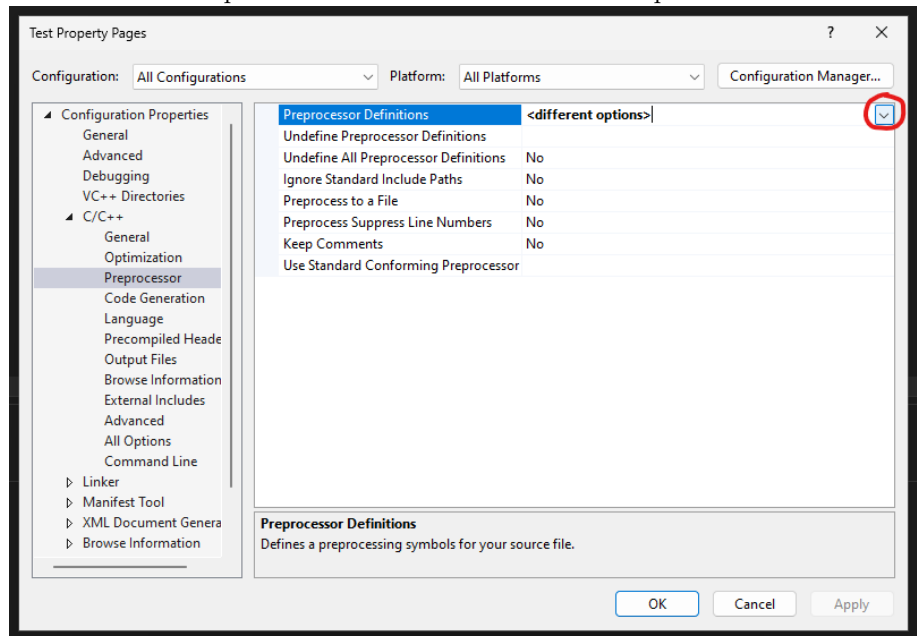
Select 'Edit'
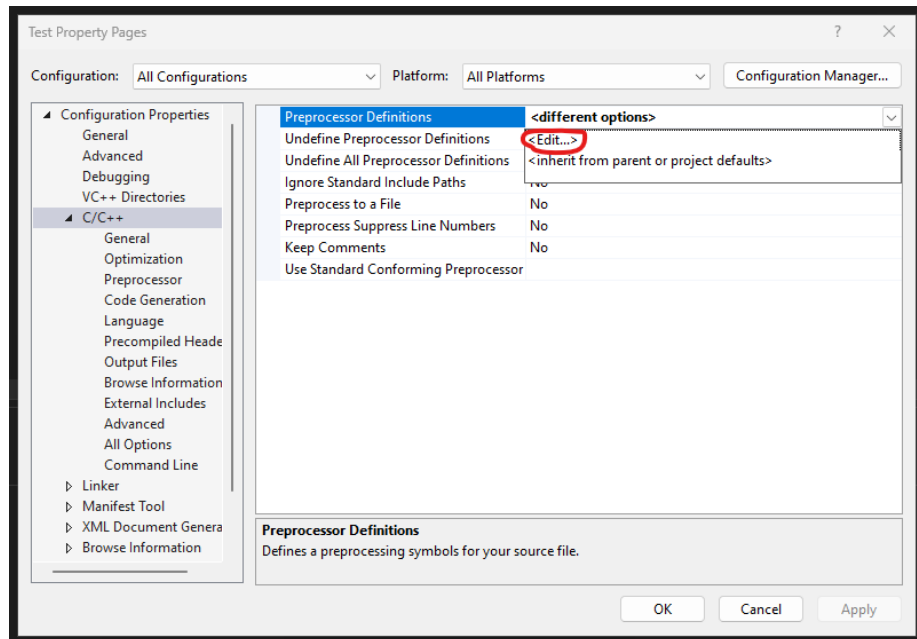
And the following new window will open:

Introduce '_CRT_SECURE_NO_WARNINGS' under '<different options>' as shown below.
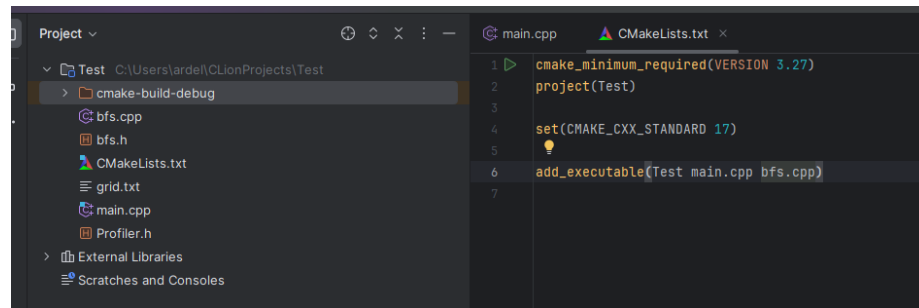
Click on 'OK' for all opened windows until you are returned to the main Visual Studio window of the project, and you will be able to run the project.
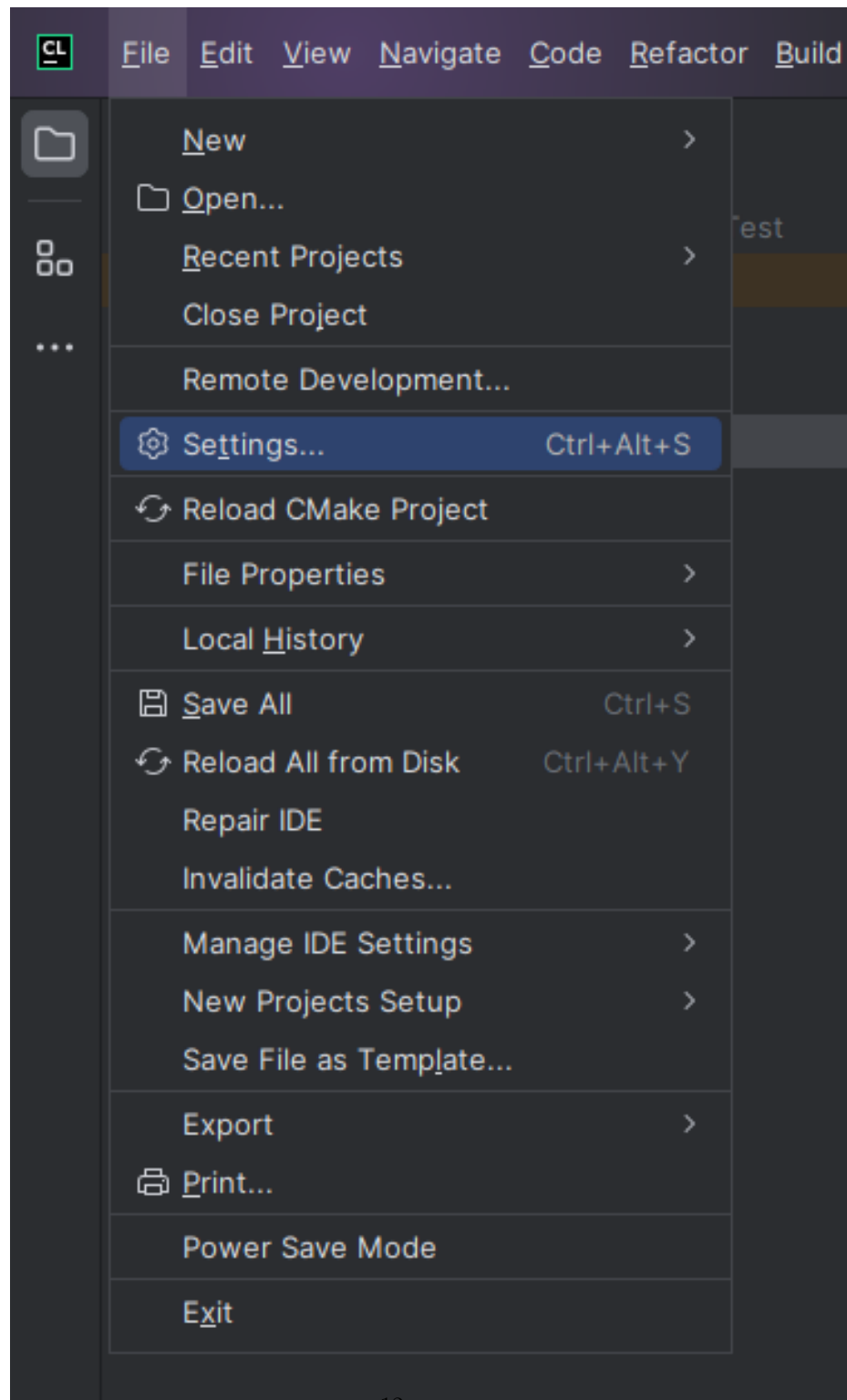
1.3 Visual Studio 'Assertion' Error

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.
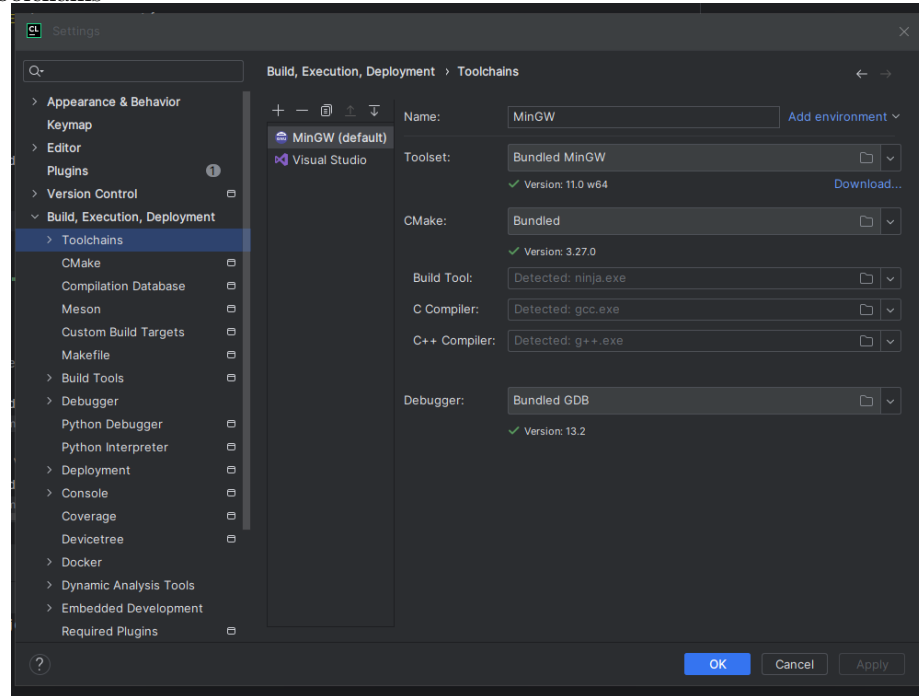
1.4 CLion undefined Error

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:

CL 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'
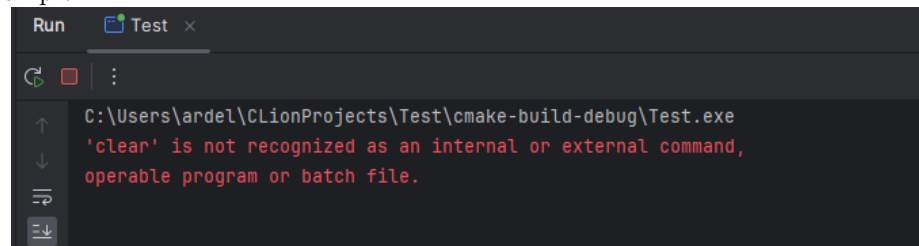

Using the arrows, move Visual Studio as default:
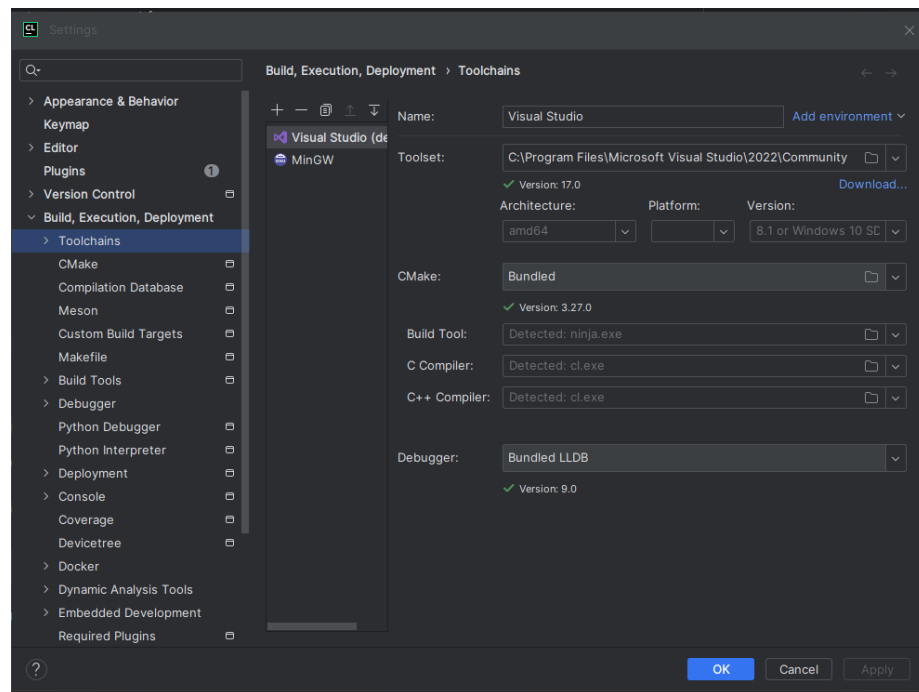
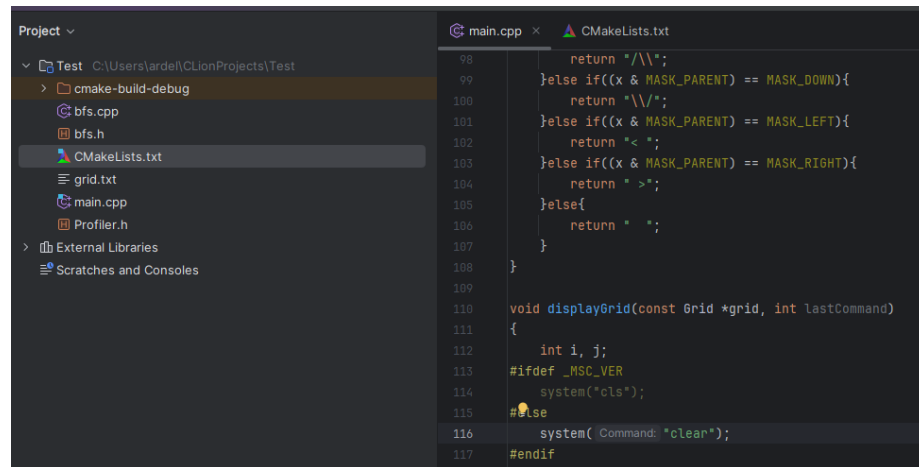## 1.6 CLion MinGW – Option 2 (faster, requires external console)
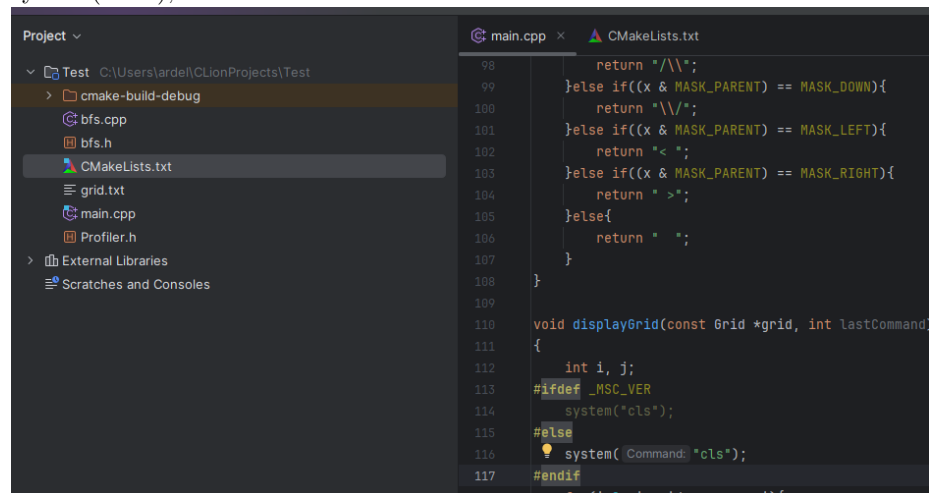
1.6.1 CLion Clear error

Example:

Solution:

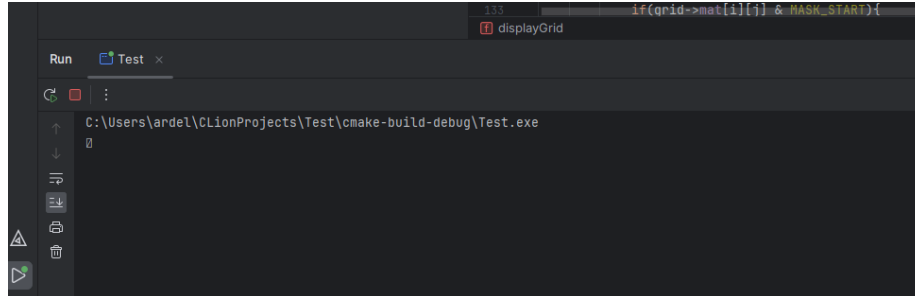Go to the main.cpp file and scroll to lines 113-117 in the displayGrid function.

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

1.6.2   CLion not showing grid

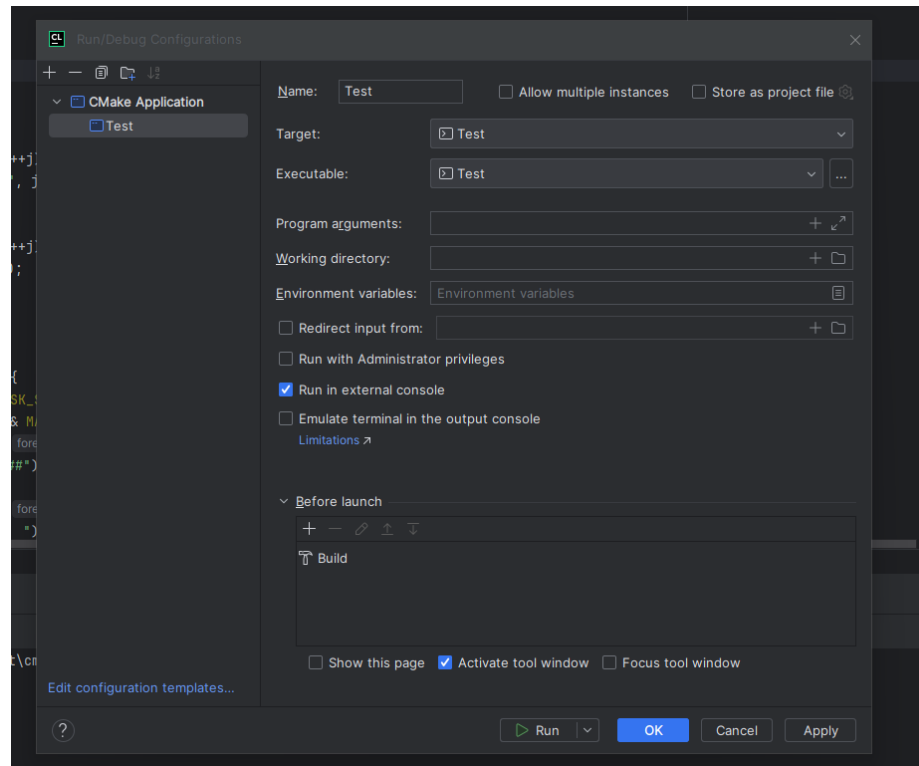Copy the 'grid.txt' file into the 'cmake-build-debug' folder.

Then go to the upper right part of the screen:
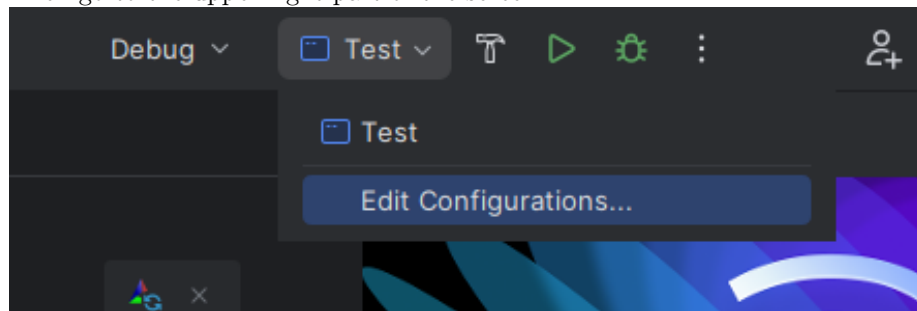
Select 'Edit Configurations' and check the following boxes:

- Run in external console

1.7 Mac run command

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