

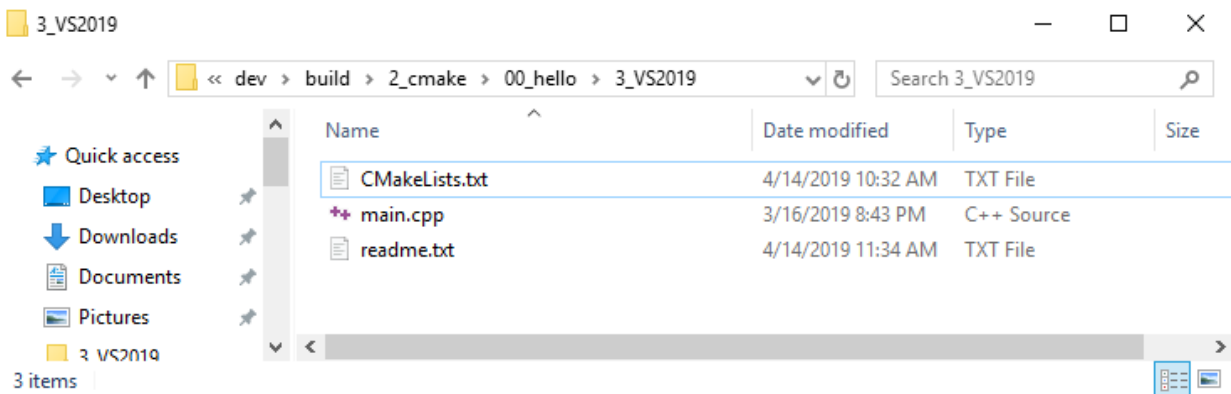
CMake Projects in VS

<https://docs.microsoft.com/en-us/cpp/build/cmake-projects-in-visual-studio?view=vs-2019>

VS-2019 CMake Project Settings UI

<https://devblogs.microsoft.com/cppblog/introducing-the-new-cmake-project-settings-ui/>

- Check CMake Version
C:\> **cmake --version**
cmake version 3.14.2
- Local directory-path :
 - D:\dev\build\2_cmake\00_hello\3_VS2019



- Contents of CMakeLists.txt:

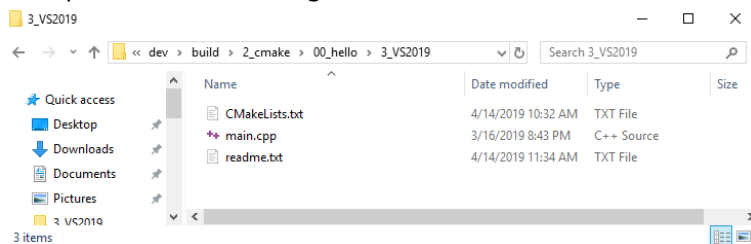
```
cmake_minimum_required(VERSION 3.10)
project(MyProject VERSION 1.0.0)

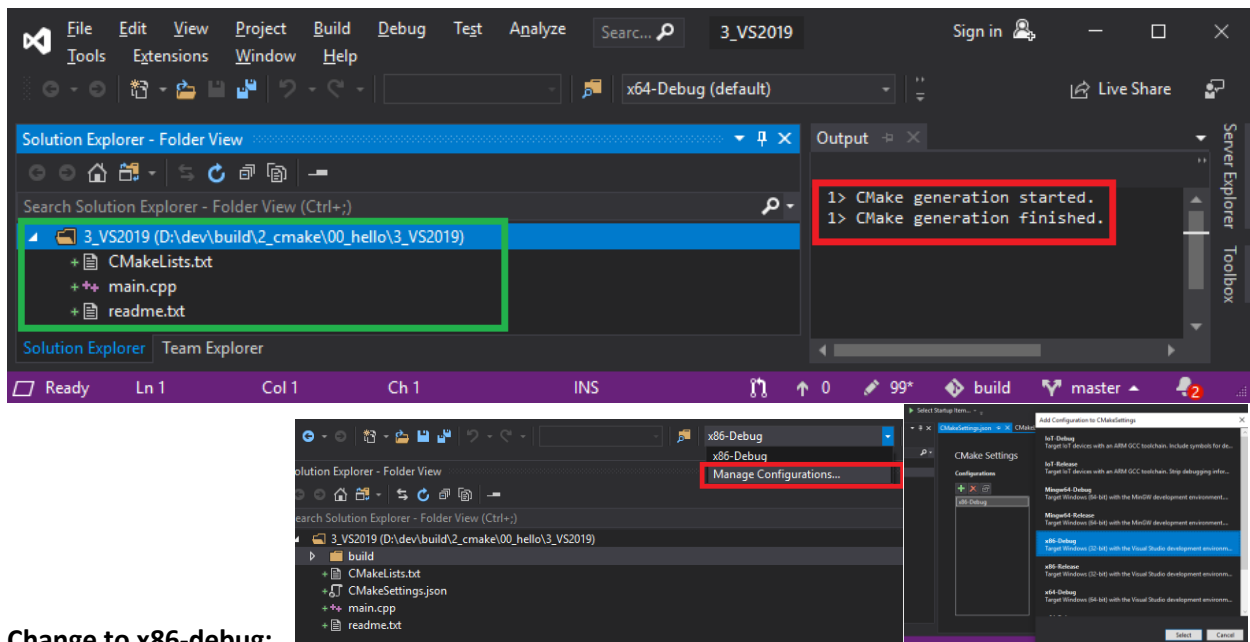
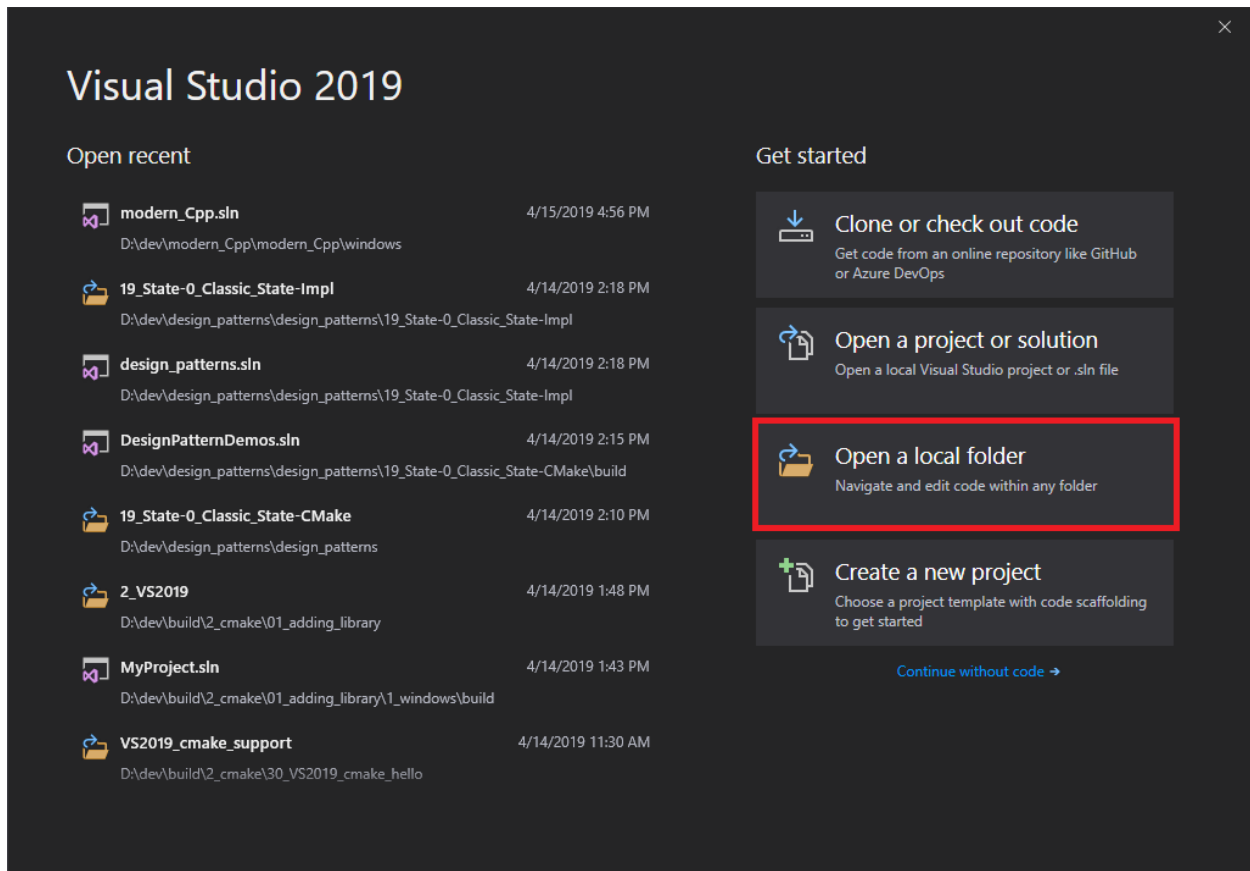
add_executable(josh main.cpp)
```

- Contents of main.cpp

```
#include <iostream>
auto main() -> int
{
    std::cout << "Hello!\n";
    return(0);
}
```

- Open folder containing the CMakeList.txt file.

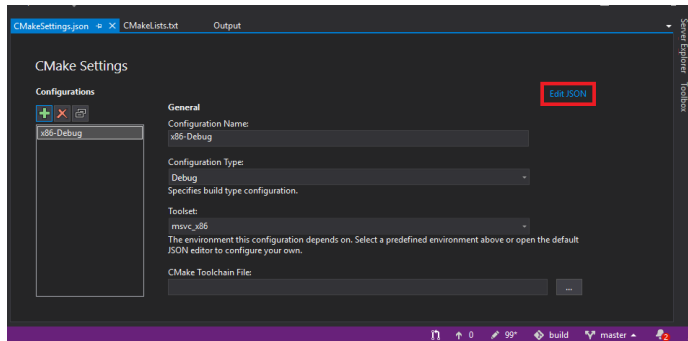




Change to x86-debug:

Edit the JSON file:

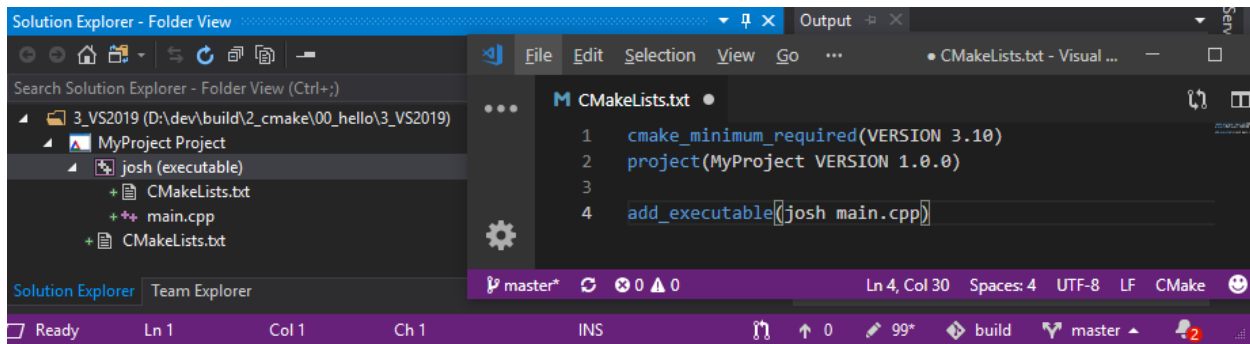
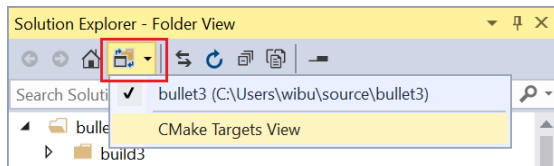
<https://docs.microsoft.com/en-us/cpp/build/configure-cmake-debugging-sessions?view=vs-2019>



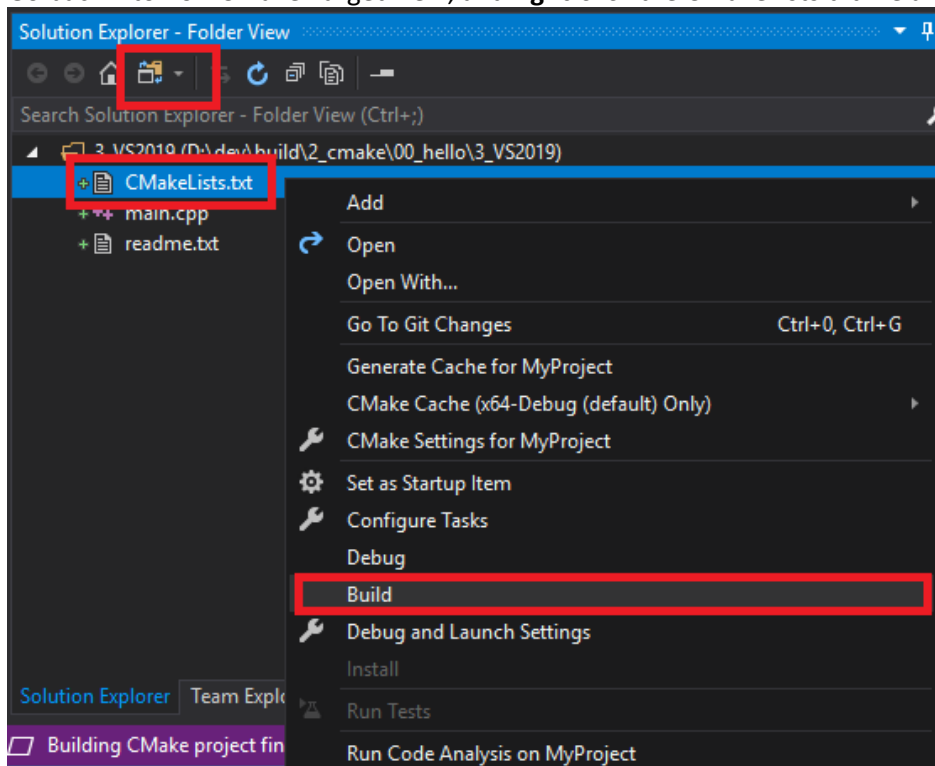
Change the **buildRoot** and **installRoot**:

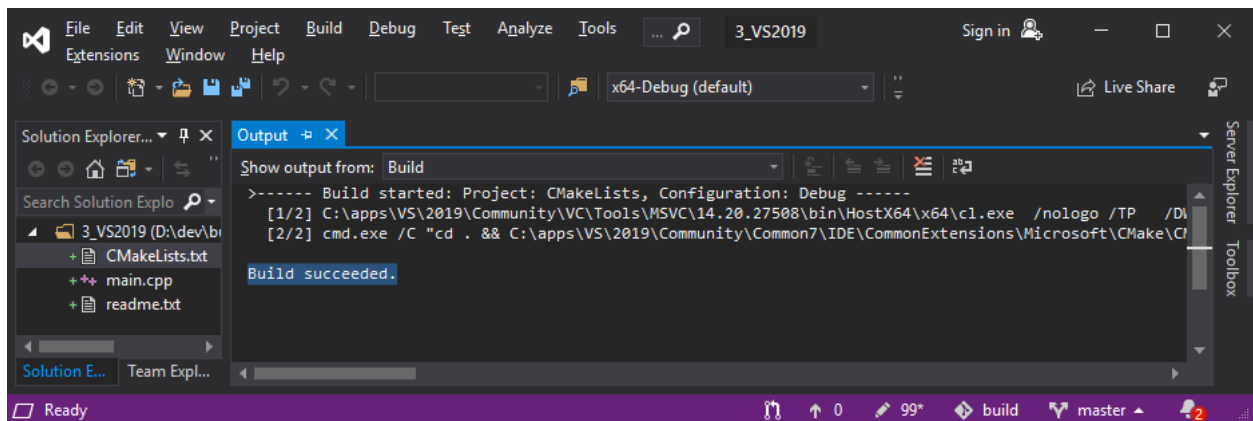
```
{
  "configurations": [
    {
      "name": "x86-Debug",
      "generator": "Ninja",
      "configurationType": "Debug",
      "buildRoot": "${workspaceRoot}\\build\\${name}",
      "installRoot": "${workspaceRoot}\\install\\${name}",
      "cmakeCommandArgs": "",
      "buildCommandArgs": "-v",
      "ctestCommandArgs": "",
      "inheritEnvironments": [ "msvc_x86" ],
      "variables": []
    }
  ]
}
```

Go into CMake view:



Go back into non-CMake Target view, and **right-click** the CMakeLists.txt file and select **build**.

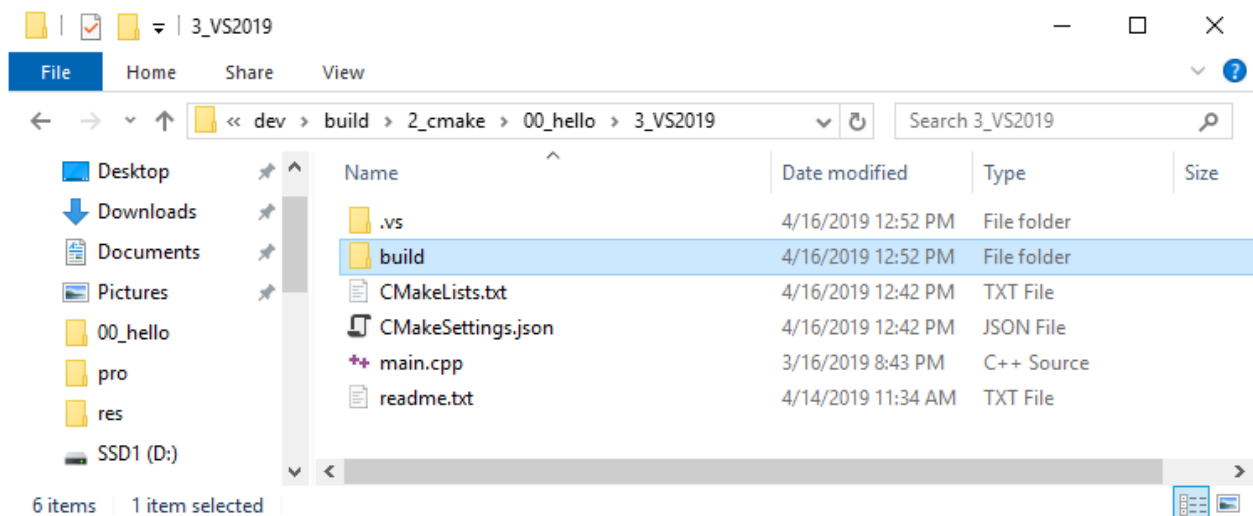




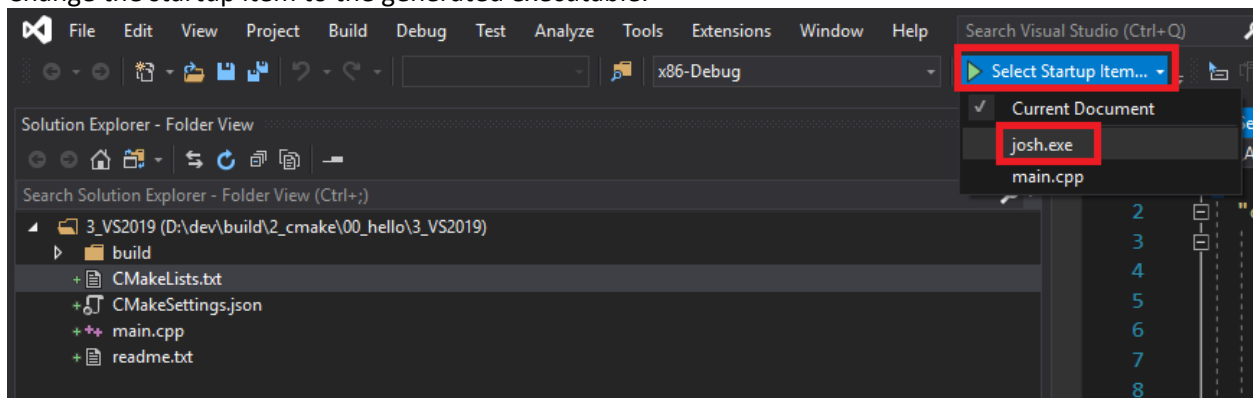
```

>----- Build started: Project: CMakeLists, Configuration: Debug -----
[1/2] C:\apps\VS\2019\Community\VC\Tools\MSVC\14.20.27508\bin\HostX64\x64\cl.exe /nologo /TP /D:WIN32 /D:WINDOWS /G3 /GR /EHsc /MDd /Zi /Ob0 /Od /RTC1 /JMC /showIncludes
/FdCMakeFiles\josh.dir\main.cpp.obj /FdCMakeFiles\josh.dir\ /FS -C D:\dev\build\2_cmake\00_hello\3_VS2019\main.cpp
[2/2] cmd.exe /C "cd . && C:\apps\VS\2019\Community\IDE\CommonExtensions\Microsoft\CMake\bin\cmake.exe --build . --config Debug --target josh -- && C:\apps\VS\2019\Community\VC\Tools\MSVC\14.20.27508\bin\HostX64\x64\cl.exe /nologo /TP /D:WIN32 /D:WINDOWS /G3 /GR /EHsc /MDd /Zi /Ob0 /Od /RTC1 /JMC /showIncludes
/FdCMakeFiles\josh.dir\main.cpp.obj /FdCMakeFiles\josh.dir\ /FS -C D:\dev\build\2_cmake\00_hello\3_VS2019\main.cpp
Build succeeded.
  
```

This will build the executable in the following directory:



Change the startup item to the generated executable:



And run it.

