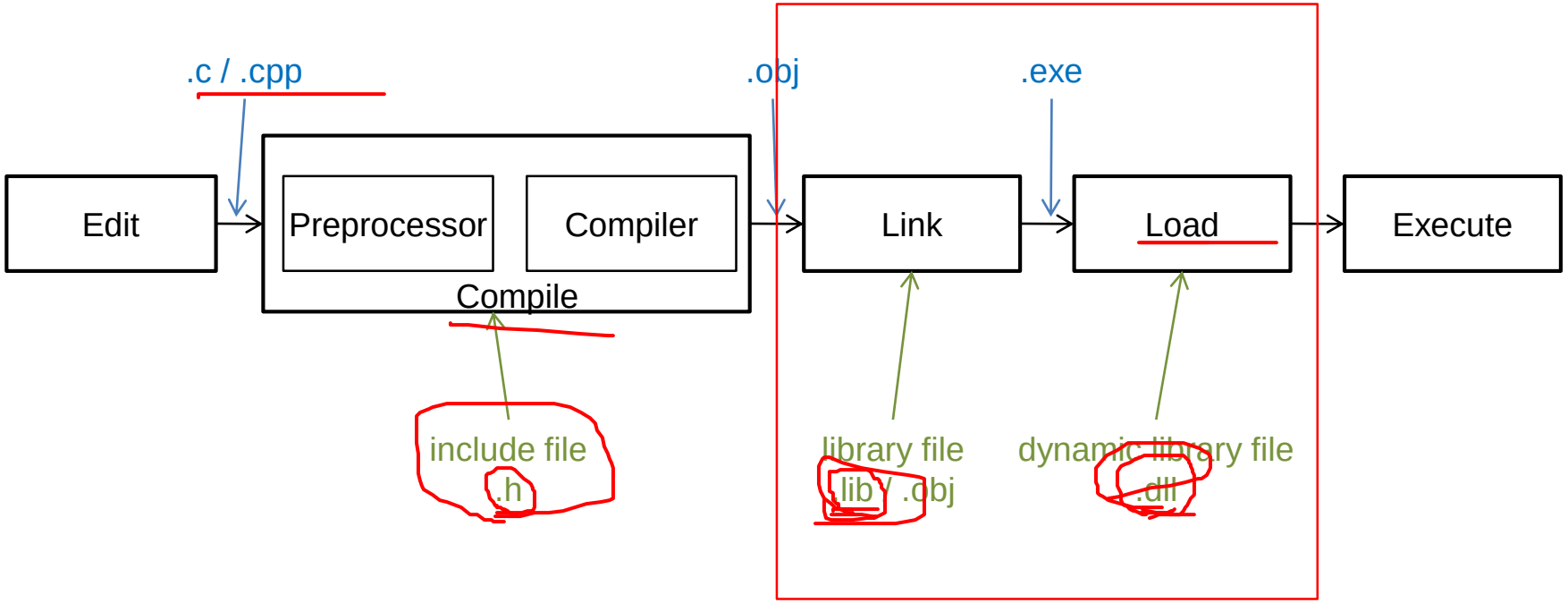
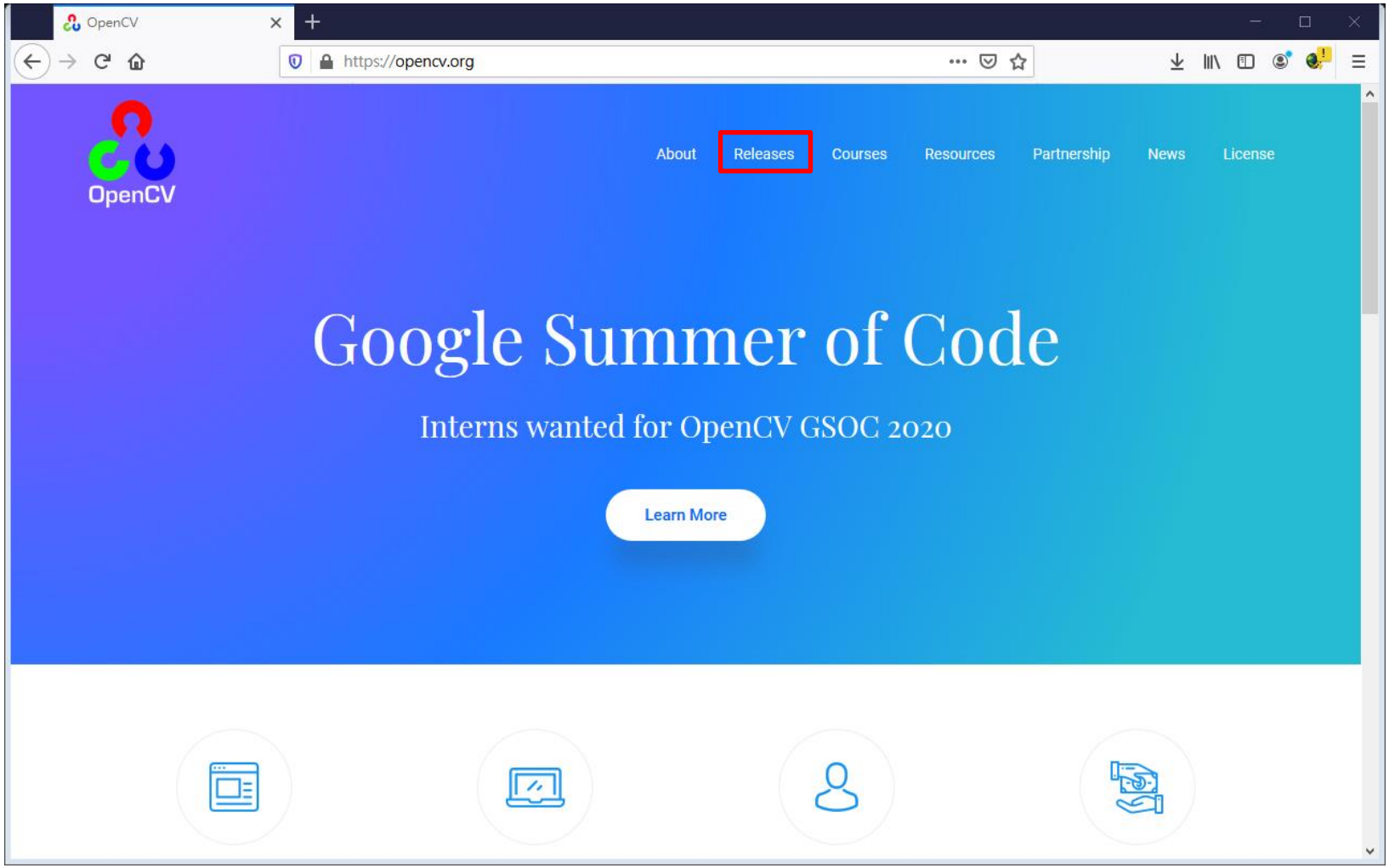
QT Opencv


.c / .cpp
.obj
.exe
Edit
Preprocessor
Compiler
Compile
Link
Load
Execute
include file
.h
library file
.lib / .obj
dynamic library file
.dll

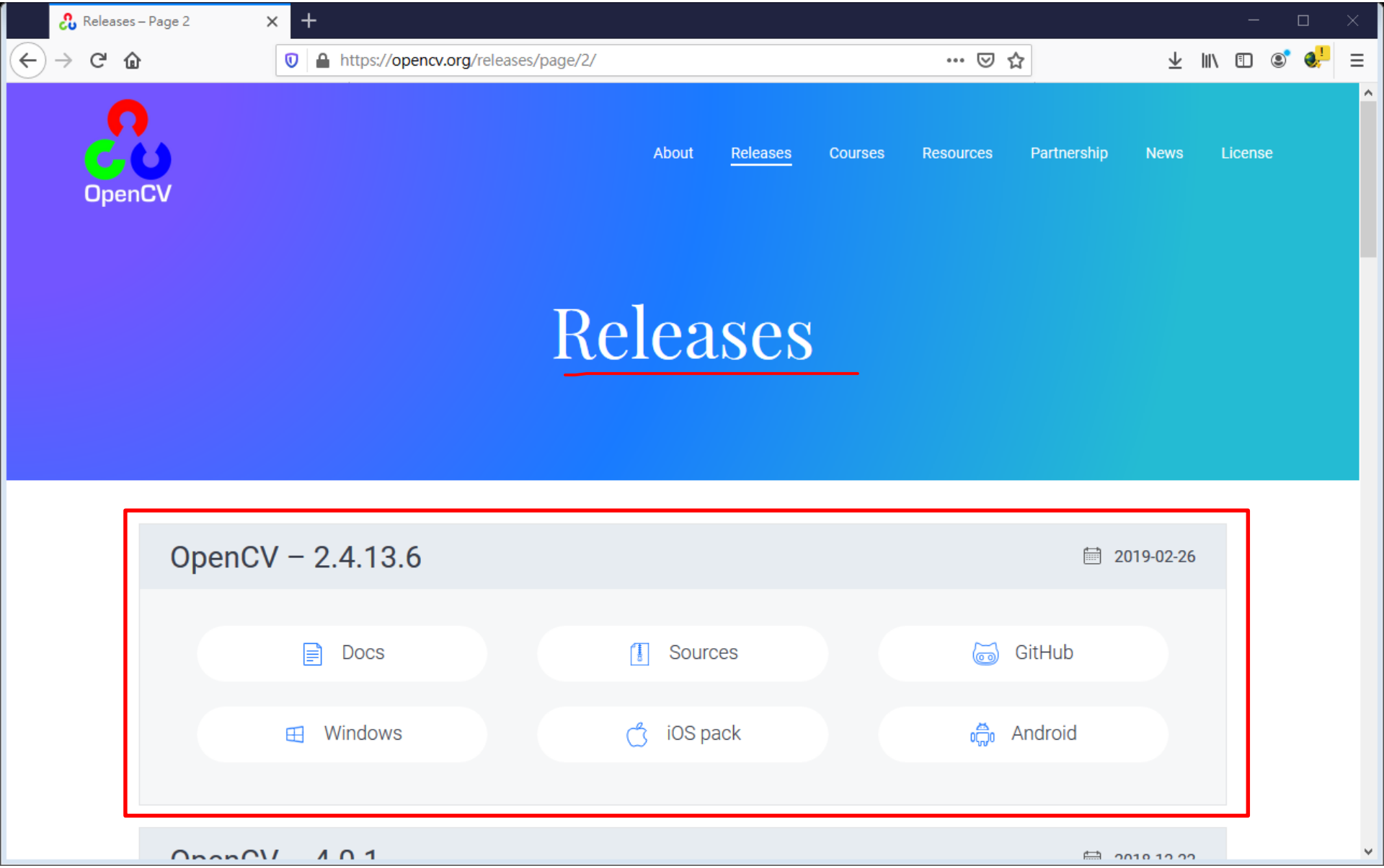
需要的軟體

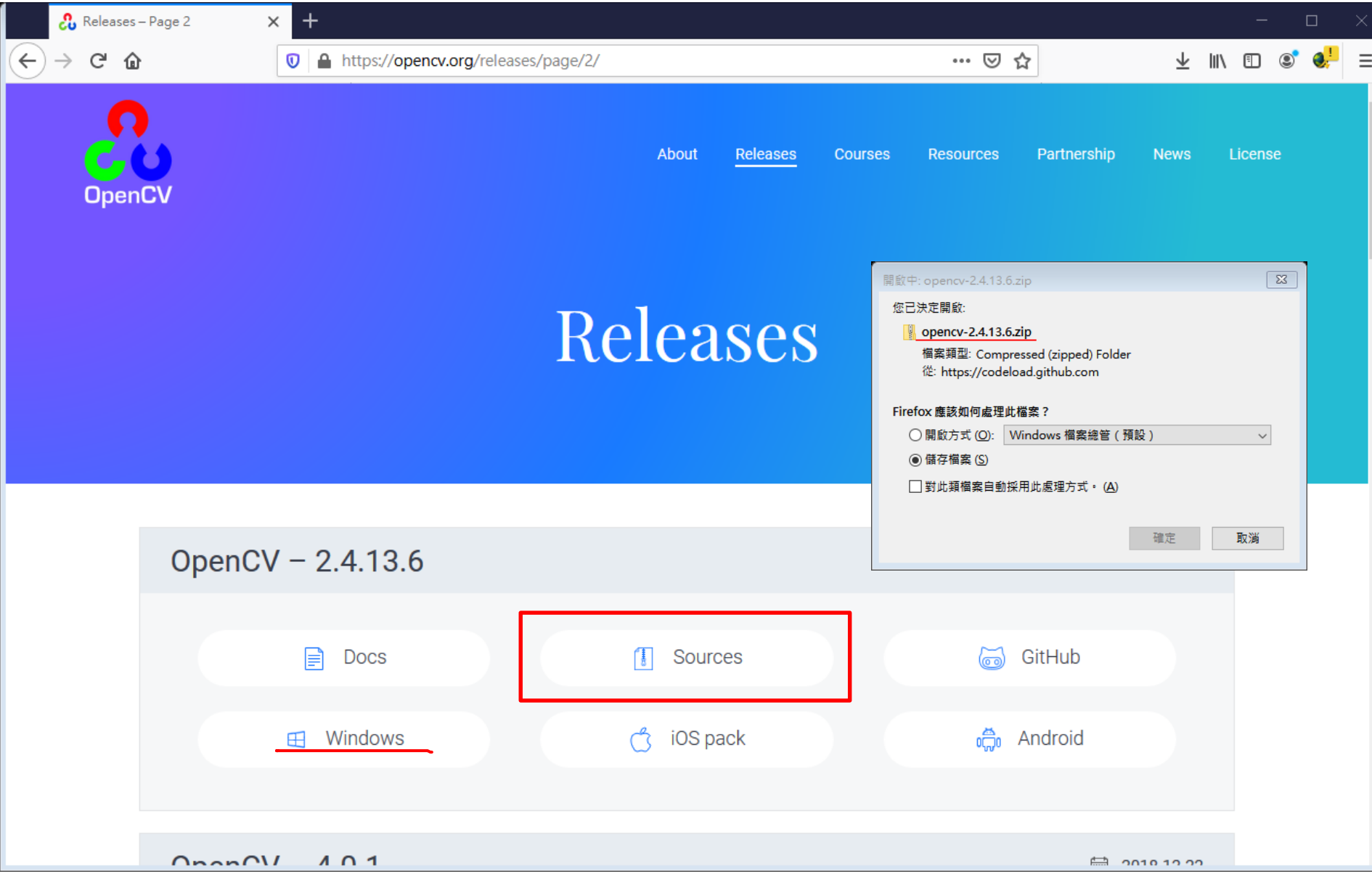
- QT
  - 含mingw32/mingw64
- Cmake
  - 產生makefile
- OpenCv
  - 或是你所需要的open source

下載OpenCV

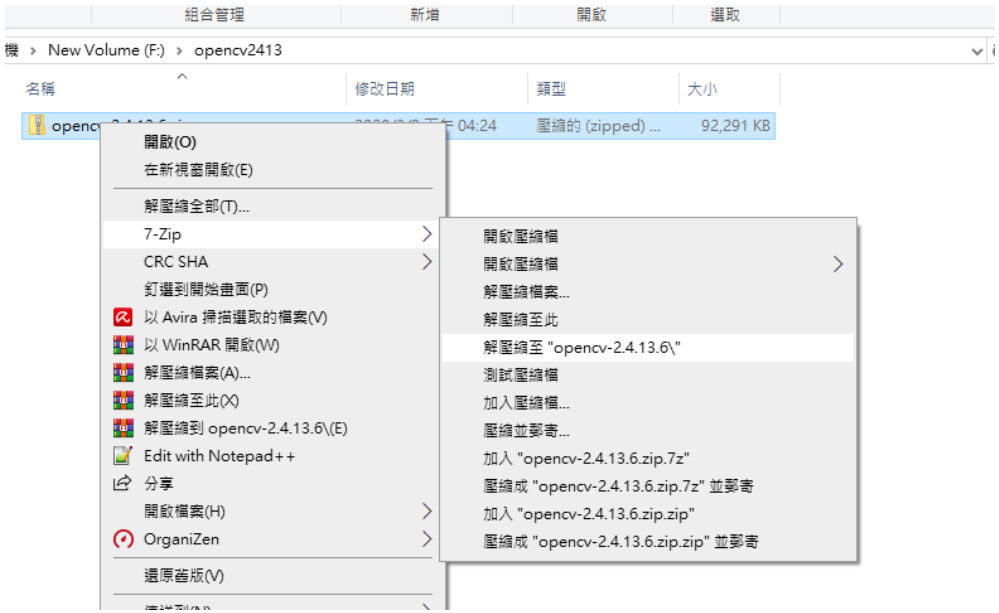


http://www.opencv.org/

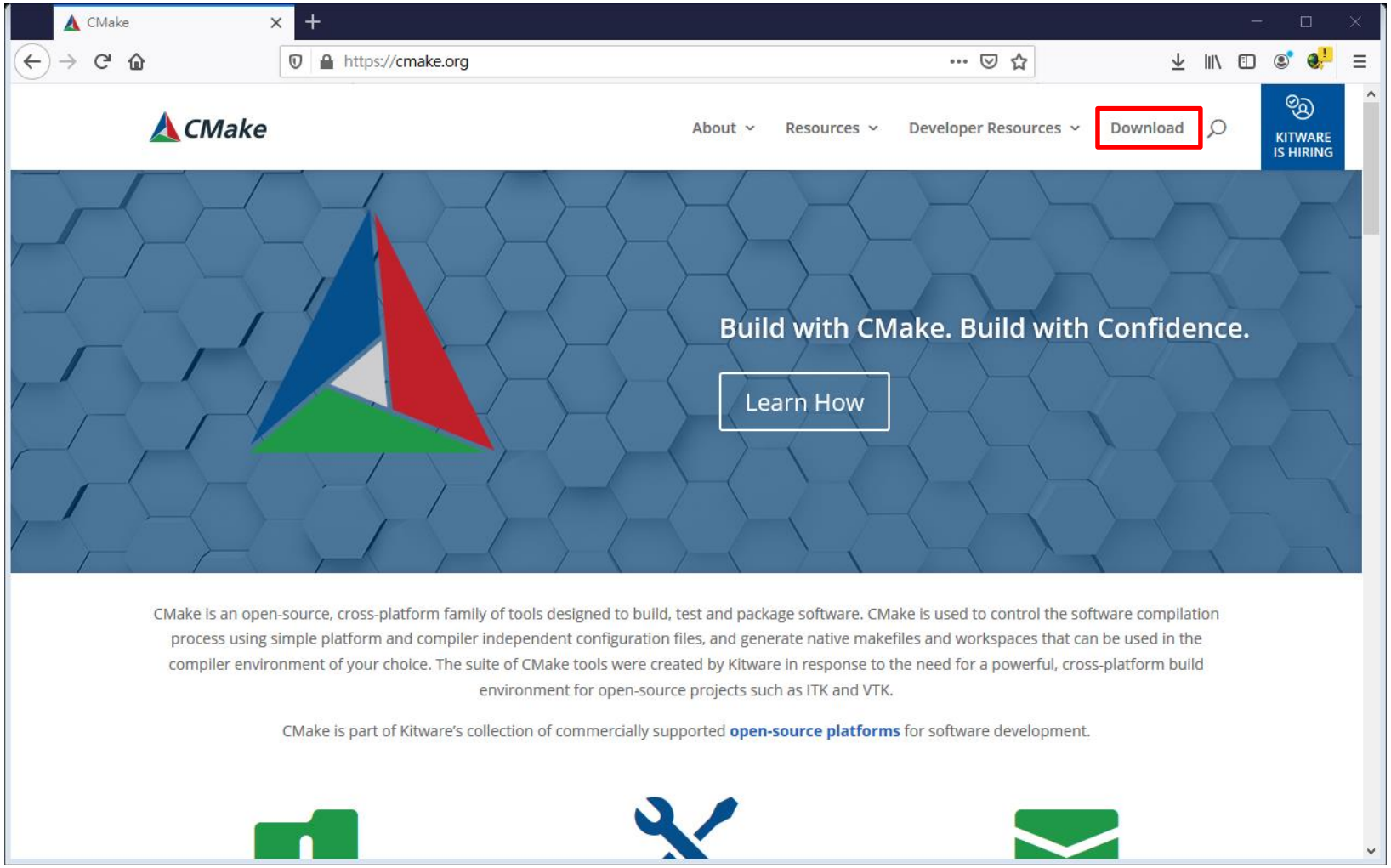

Releases – Page 2
https://opencv.org/releases/page/2/
OpenCV
About
Releases
Courses
Resources
Partnership
News
License
Releases
OpenCV – 2.4.13.6
2019-02-26
Docs
Sources
GitHub
Windows
iOS pack
Android


Releases – Page 2
https://opencv.org/releases/page/2/
OpenCV
About
Releases
Courses
Resources
Partnership
News
License
Releases
開啟中: opencv-2.4.13.6.zip
您已決定開啟:
opencv-2.4.13.6.zip
檔案類型: Compressed (zipped) Folder
從: https://codeload.github.com
Firefox 應該如何處理此檔案？
開啟方式 (O): Windows 檔案總管 (預設)
儲存檔案 (S)
對此類檔案自動採用此處理方式。 (A)
確定
取消
OpenCV – 2.4.13.6
Docs
Sources
GitHub
Windows
iOS pack
Android

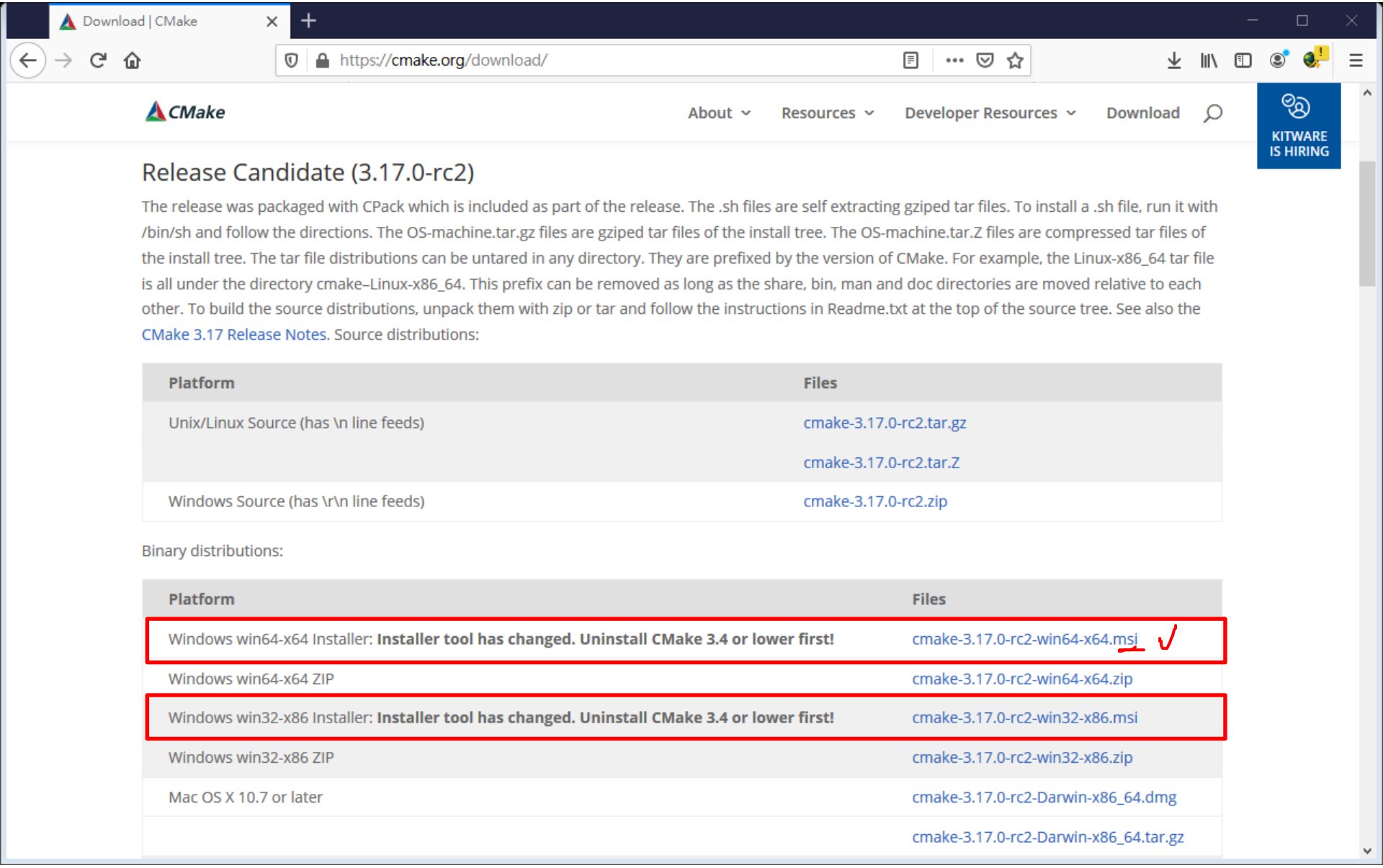
存在一個專屬的資料夾並且解壓縮

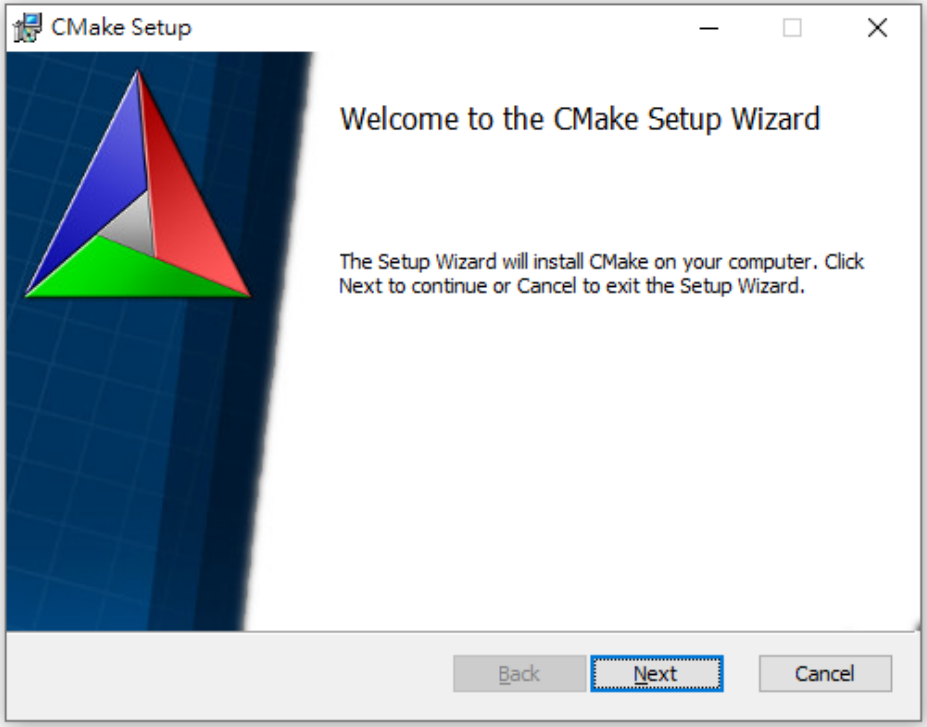


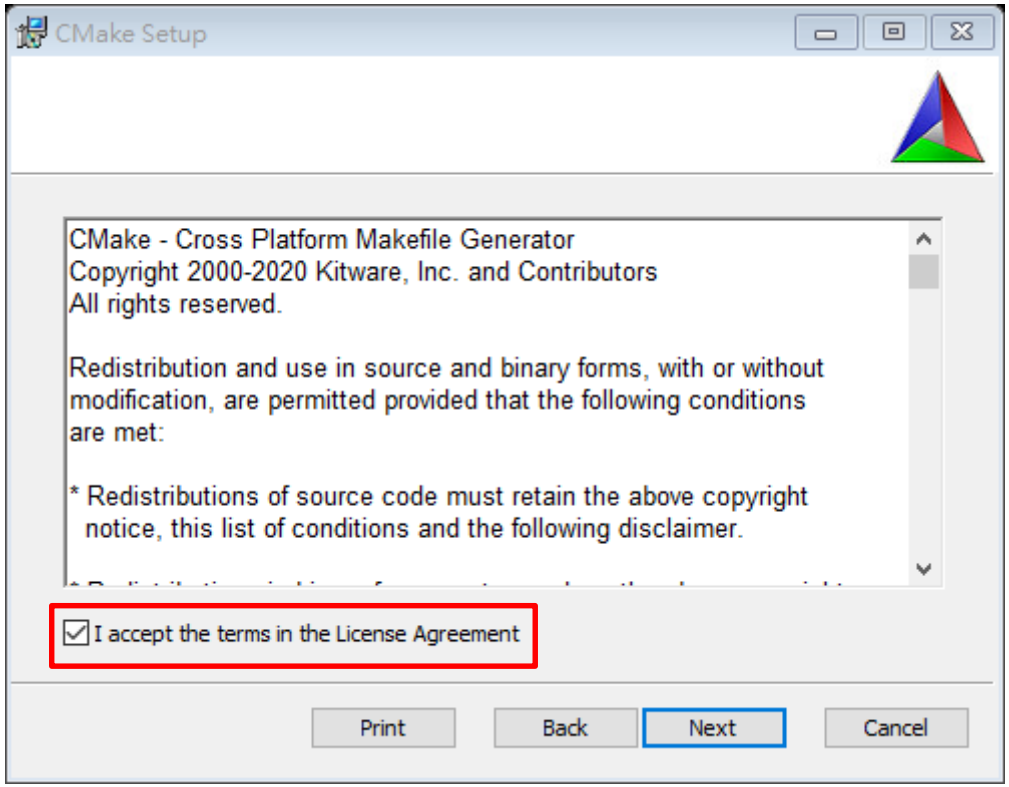
下載CMake

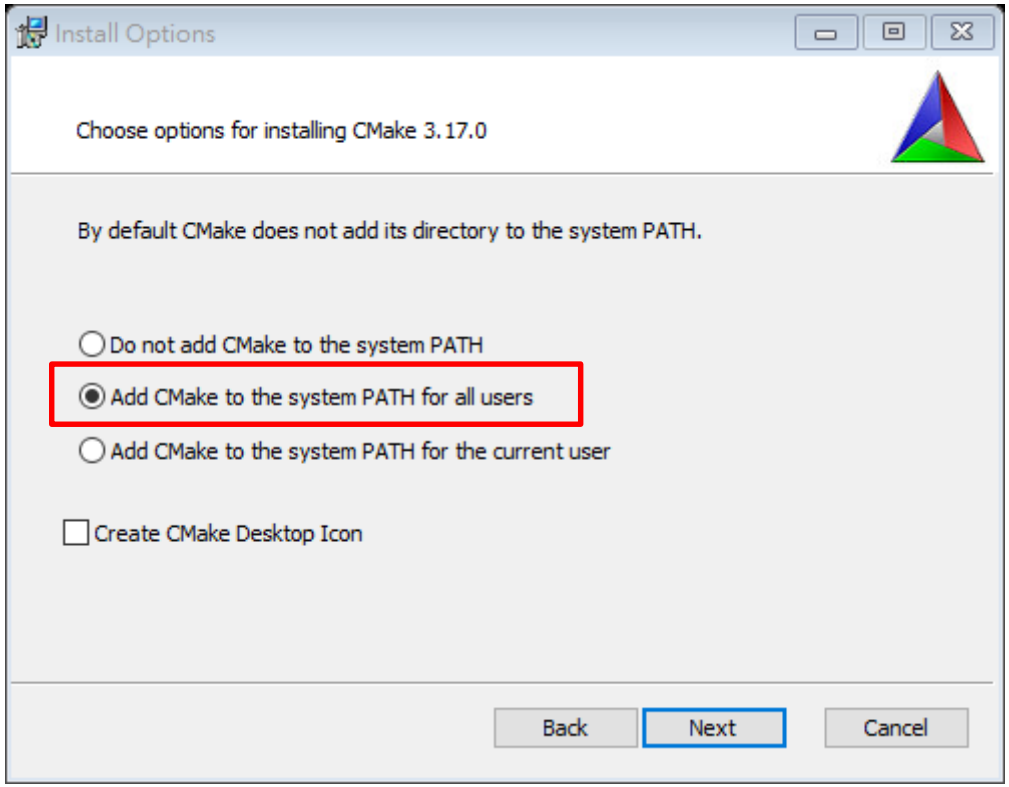


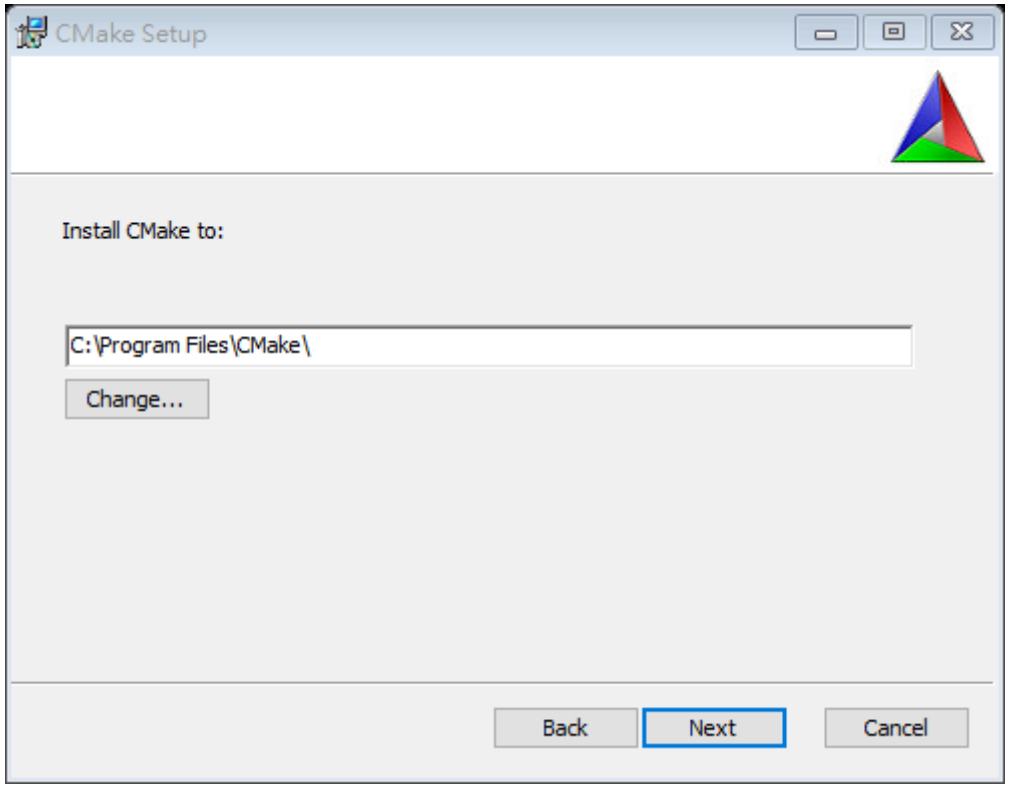
http://www.cmake.org/

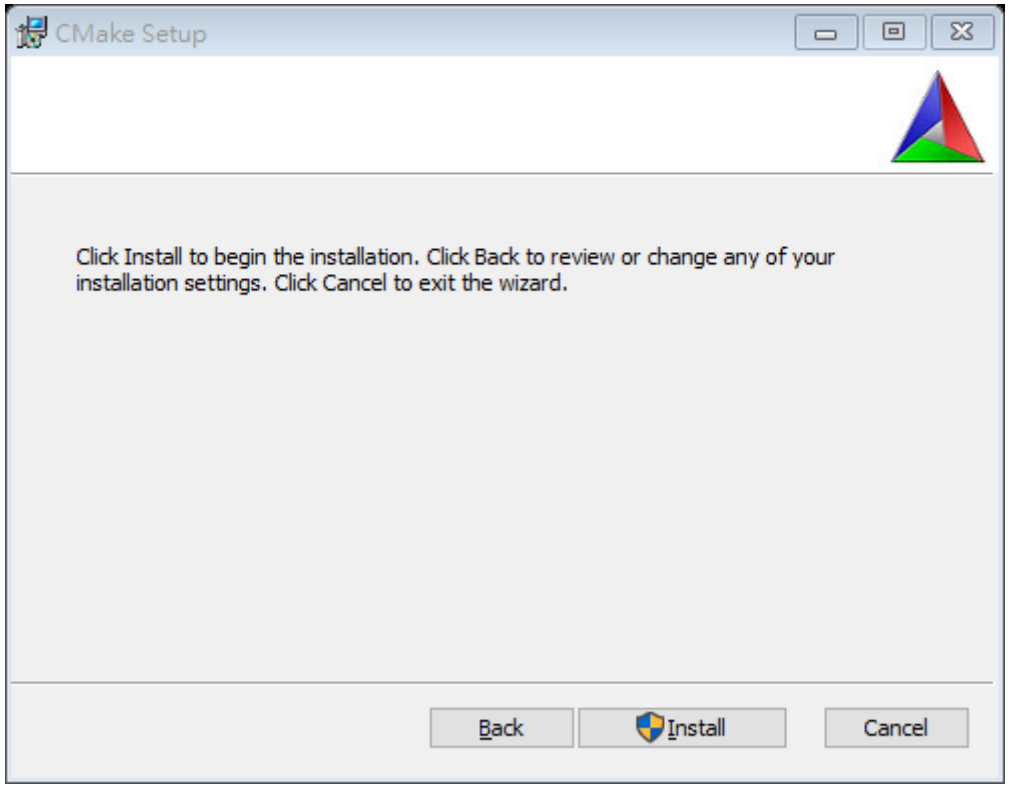

Download | CMake
https://cmake.org/download/
CMake
About
Resources
Developer Resources
Download
KITWARE IS HIRING
Release Candidate (3.17.0-rc2)
The release was packaged with CPack which is included as part of the release. The .sh files are self extracting gziped tar files. To install a .sh file, run it with /bin/sh and follow the directions. The OS-machine.tar.gz files are gziped tar files of the install tree. The OS-machine.tar.Z files are compressed tar files of the install tree. The tar file distributions can be untared in any directory. They are prefixed by the version of CMake. For example, the Linux-x86_64 tar file is all under the directory cmake–Linux-x86_64. This prefix can be removed as long as the share, bin, man and doc directories are moved relative to each other. To build the source distributions, unpack them with zip or tar and follow the instructions in Readme.txt at the top of the source tree. See also the CMake 3.17 Release Notes. Source distributions:
Platform
Files
Unix/Linux Source (has \n line feeds)
cmake-3.17.0-rc2.tar.gz
cmake-3.17.0-rc2.tar.Z
Windows Source (has \r\n line feeds)
cmake-3.17.0-rc2.zip
Binary distributions:
Platform
Files
Windows win64-x64 Installer: Installer tool has changed. Uninstall CMake 3.4 or lower first!
cmake-3.17.0-rc2-win64-x64.msi
Windows win64-x64 ZIP
cmake-3.17.0-rc2-win64-x64.zip
Windows win32-x86 Installer: Installer tool has changed. Uninstall CMake 3.4 or lower first!
cmake-3.17.0-rc2-win32-x86.msi
Windows win32-x86 ZIP
cmake-3.17.0-rc2-win32-x86.zip
Mac OS X 10.7 or later
cmake-3.17.0-rc2-Darwin-x86_64.dmg
cmake-3.17.0-rc2-Darwin-x86_64.tar.gz

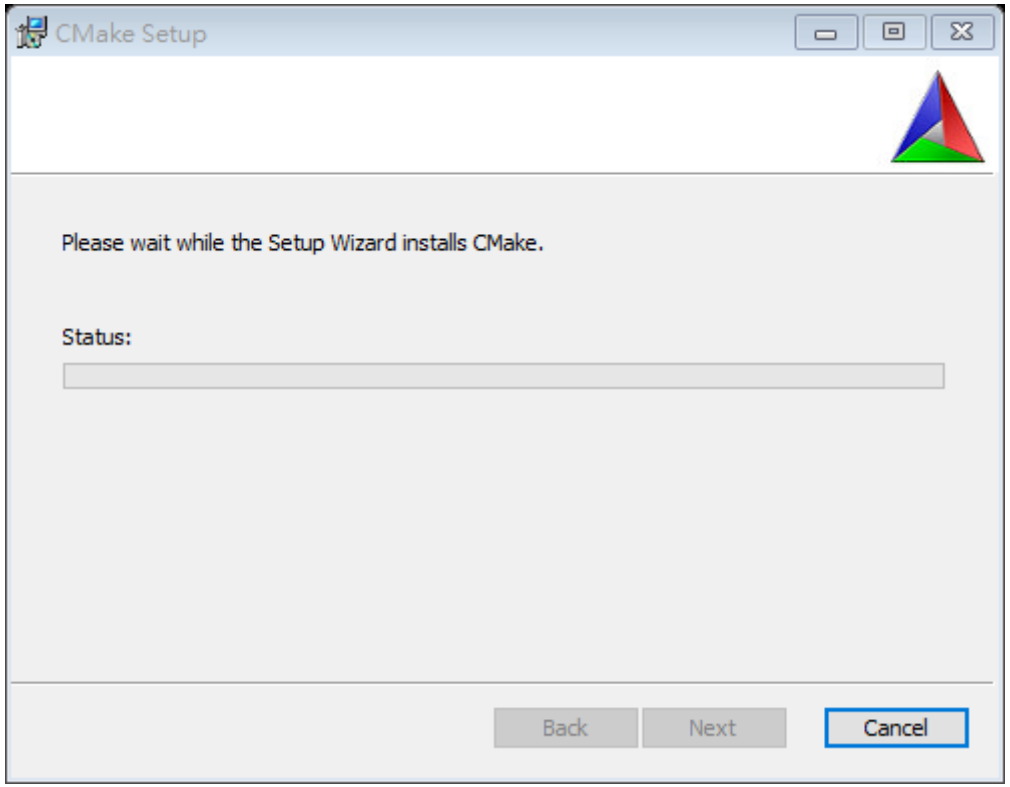

CMake Setup
Welcome to the CMake Setup Wizard
The Setup Wizard will install CMake on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
Back
Next
Cancel

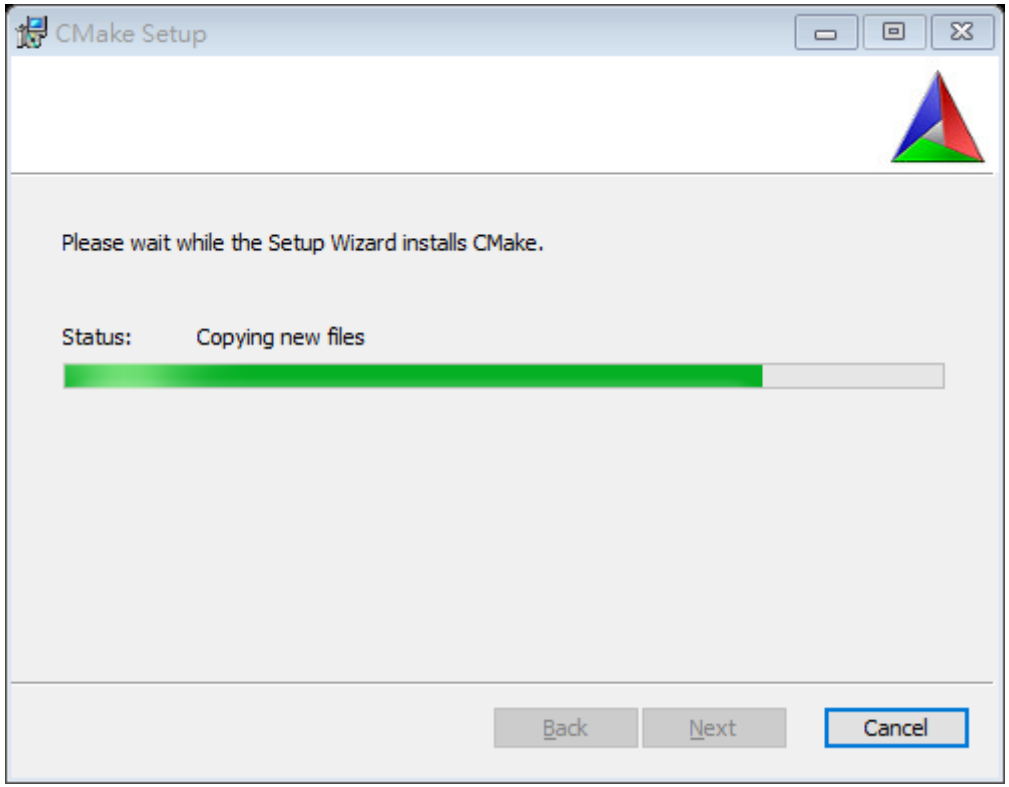

CMake Setup
CMake - Cross Platform Makefile Generator
Copyright 2000-2020 Kitware, Inc. and Contributors
All rights reserved.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
I accept the terms in the License Agreement
Print
Back
Next
Cancel

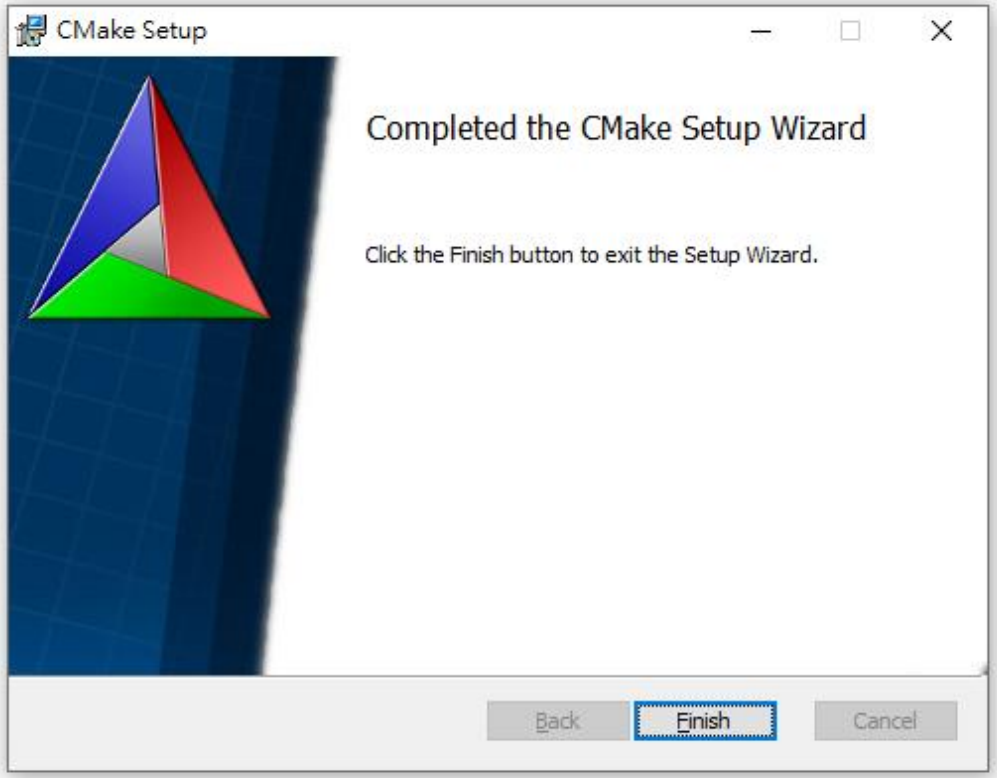

Install Options
Choose options for installing CMake 3.17.0
By default CMake does not add its directory to the system PATH.
Do not add CMake to the system PATH
Add CMake to the system PATH for all users
Add CMake to the system PATH for the current user
Create CMake Desktop Icon
Back
Next
Cancel


CMake Setup
Install CMake to:
C:\Program Files\CMake\
Change...
Back
Next
Cancel


CMake Setup
Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.
Back
Install
Cancel


CMake Setup
Please wait while the Setup Wizard installs CMake.
Status:
Back
Next
Cancel


CMake Setup
Please wait while the Setup Wizard installs CMake.
Status: Copying new files
Back
Next
Cancel


CMake Setup
Completed the CMake Setup Wizard
Click the Finish button to exit the Setup Wizard.
Back
Finish
Cancel

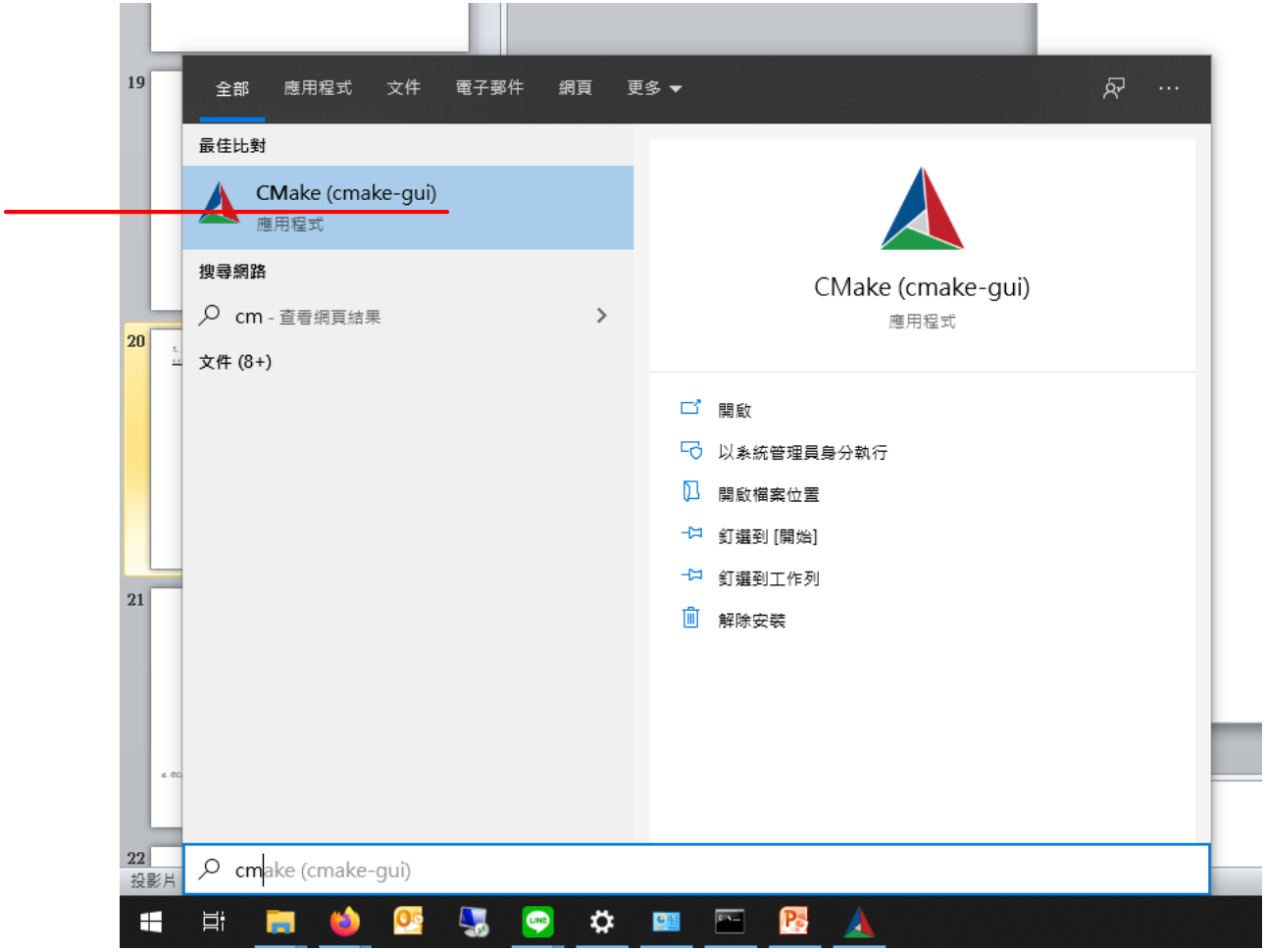
Compile OpenCV

在剛剛解開opencv的資料夾當中再建立一個輸出用的資料夾

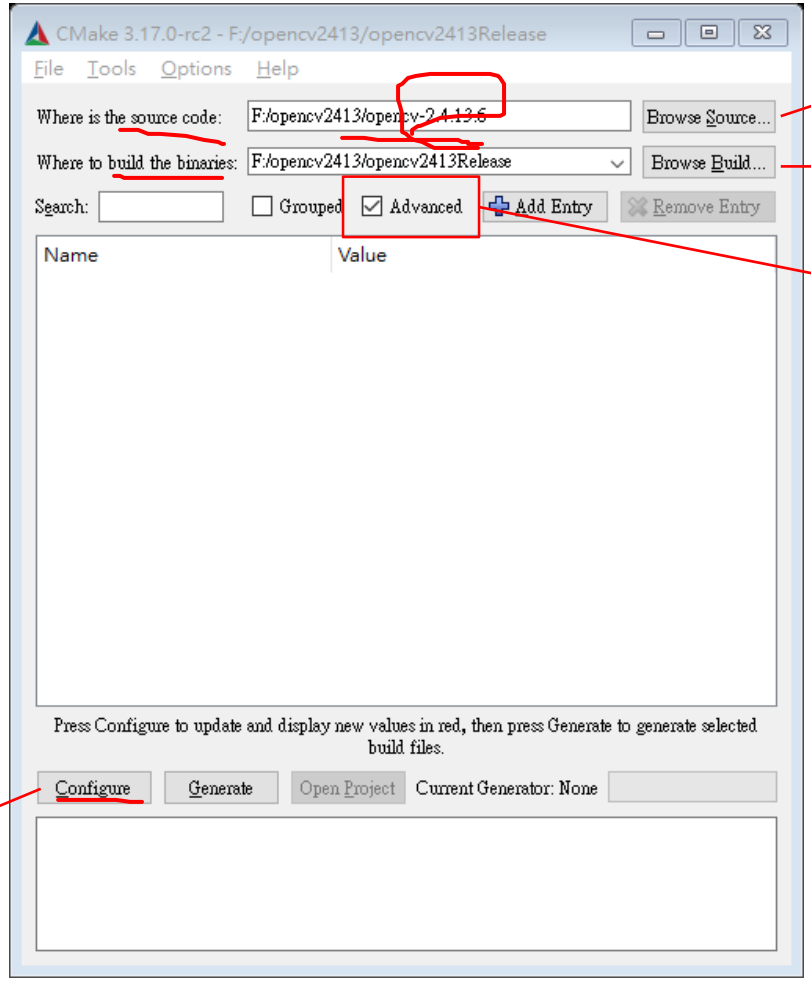
opencv2413Release

1. 產生make file

1.1 執行cmake



1.2 設定路徑



a. 原始程式資料夾(source)

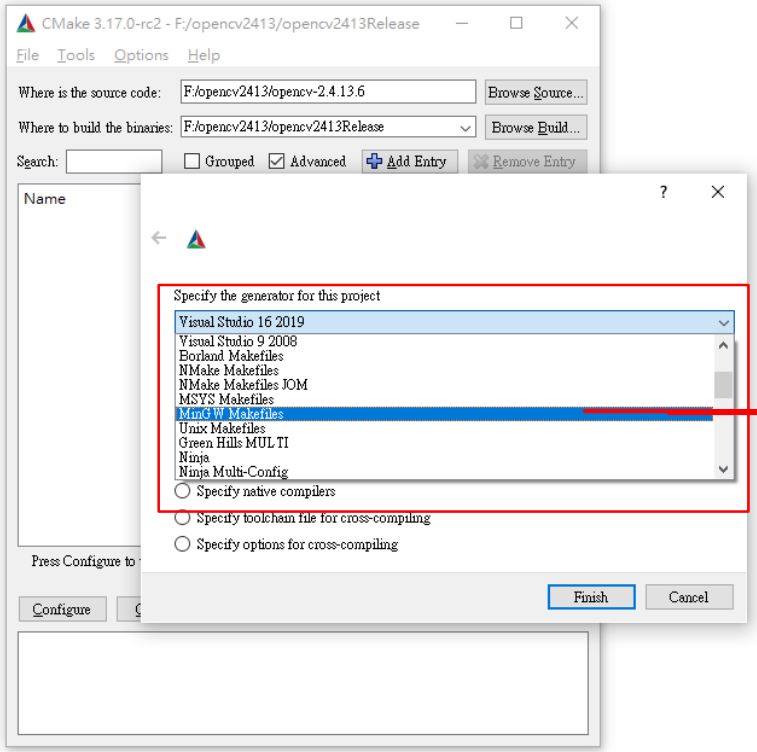
b. 輸出資料夾(build)

c. 勾選advanced

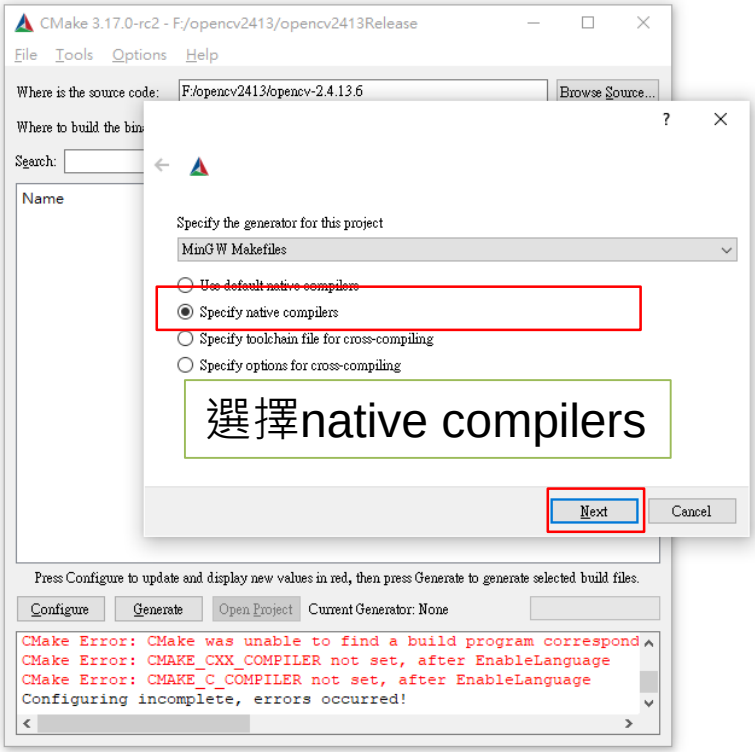
輸出資料夾(build)為組態後的程式碼，還需要再經過一次compile才能使用

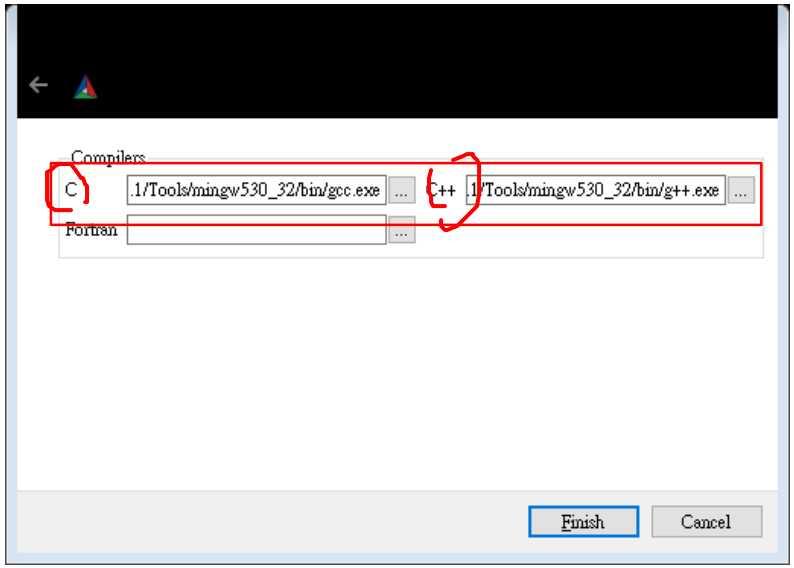
d. 按Configure

1.3 選擇makefile及compiler



選擇產生的Makefile格式
(MinGW Makefiles)

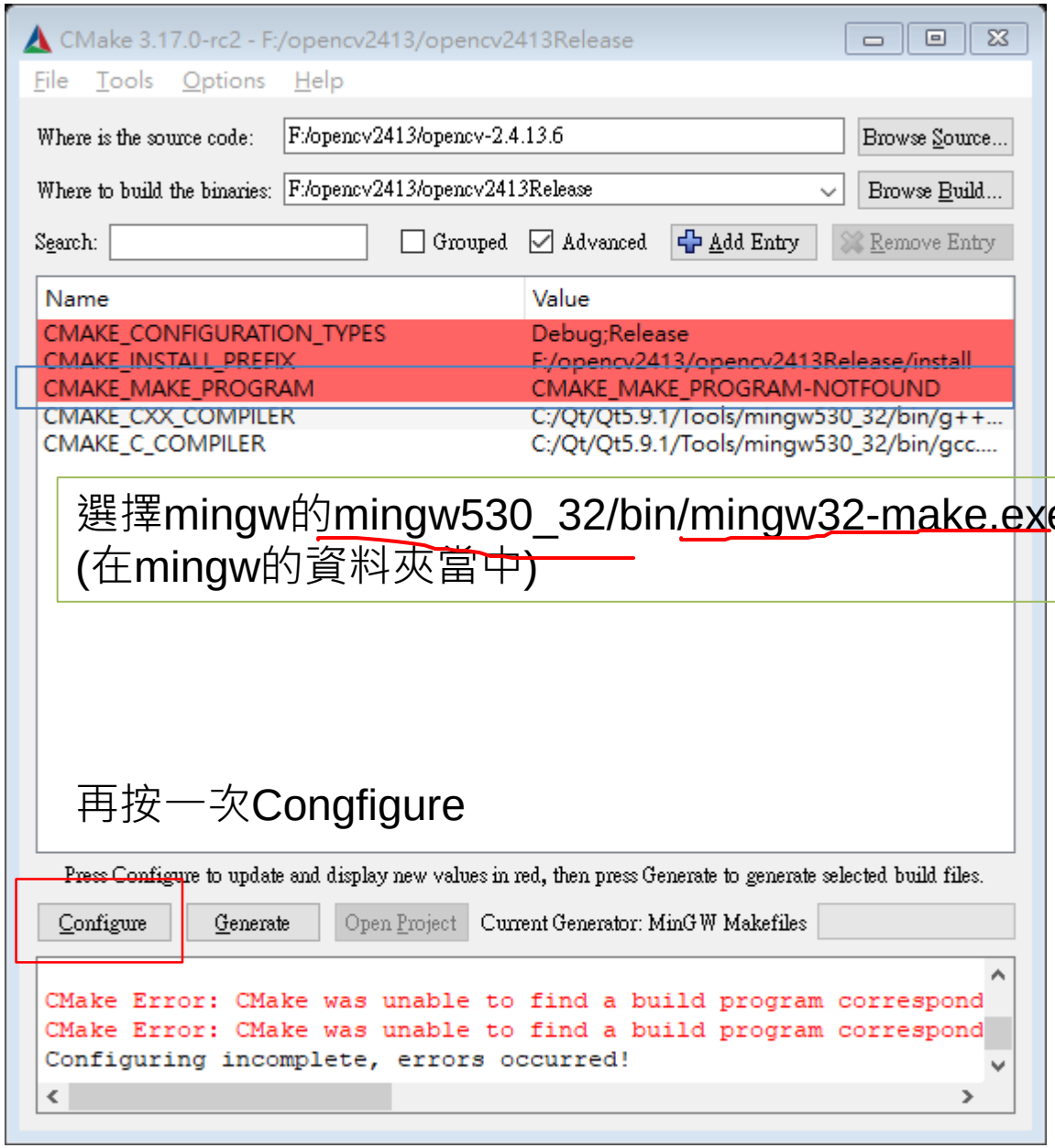


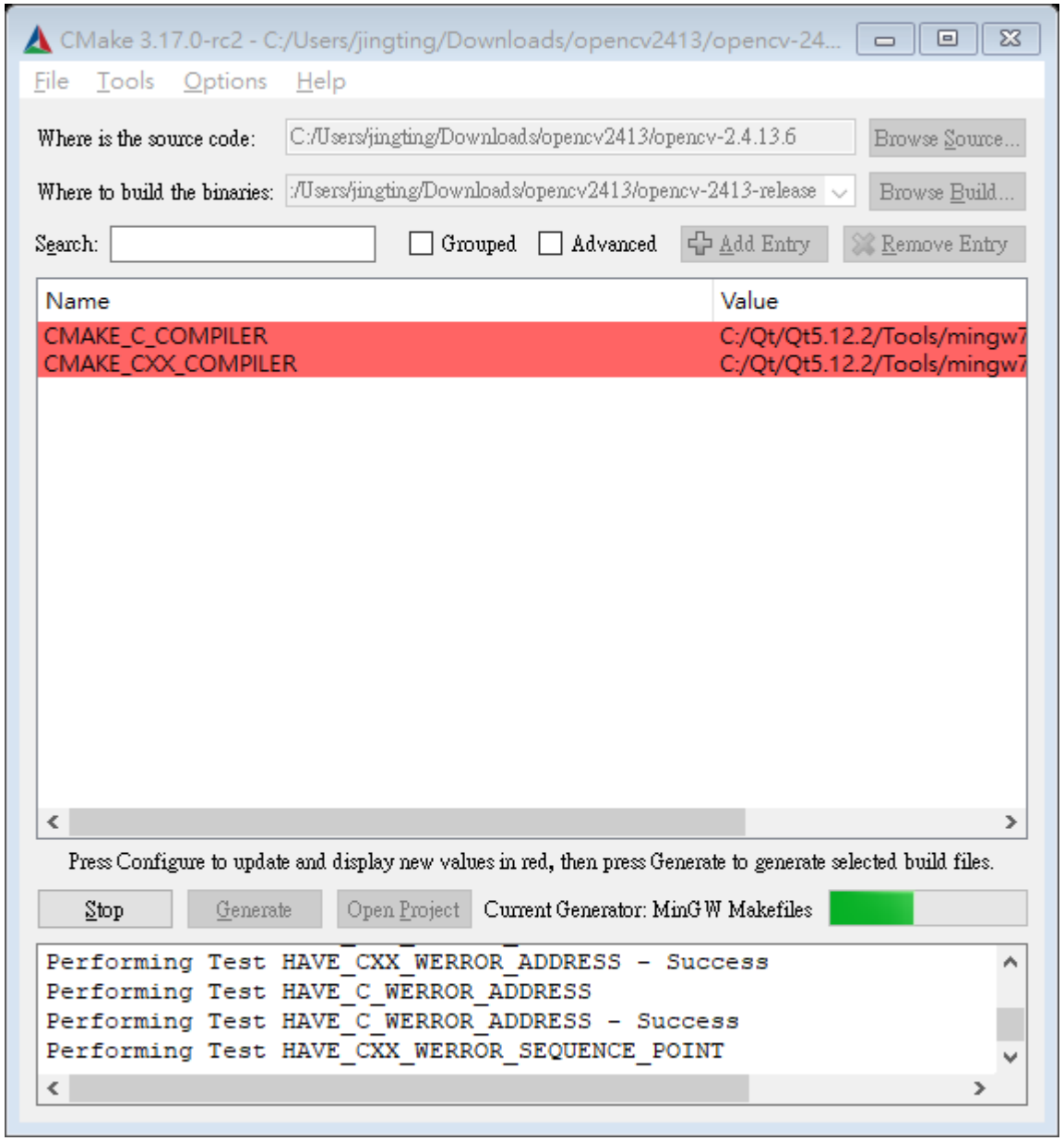


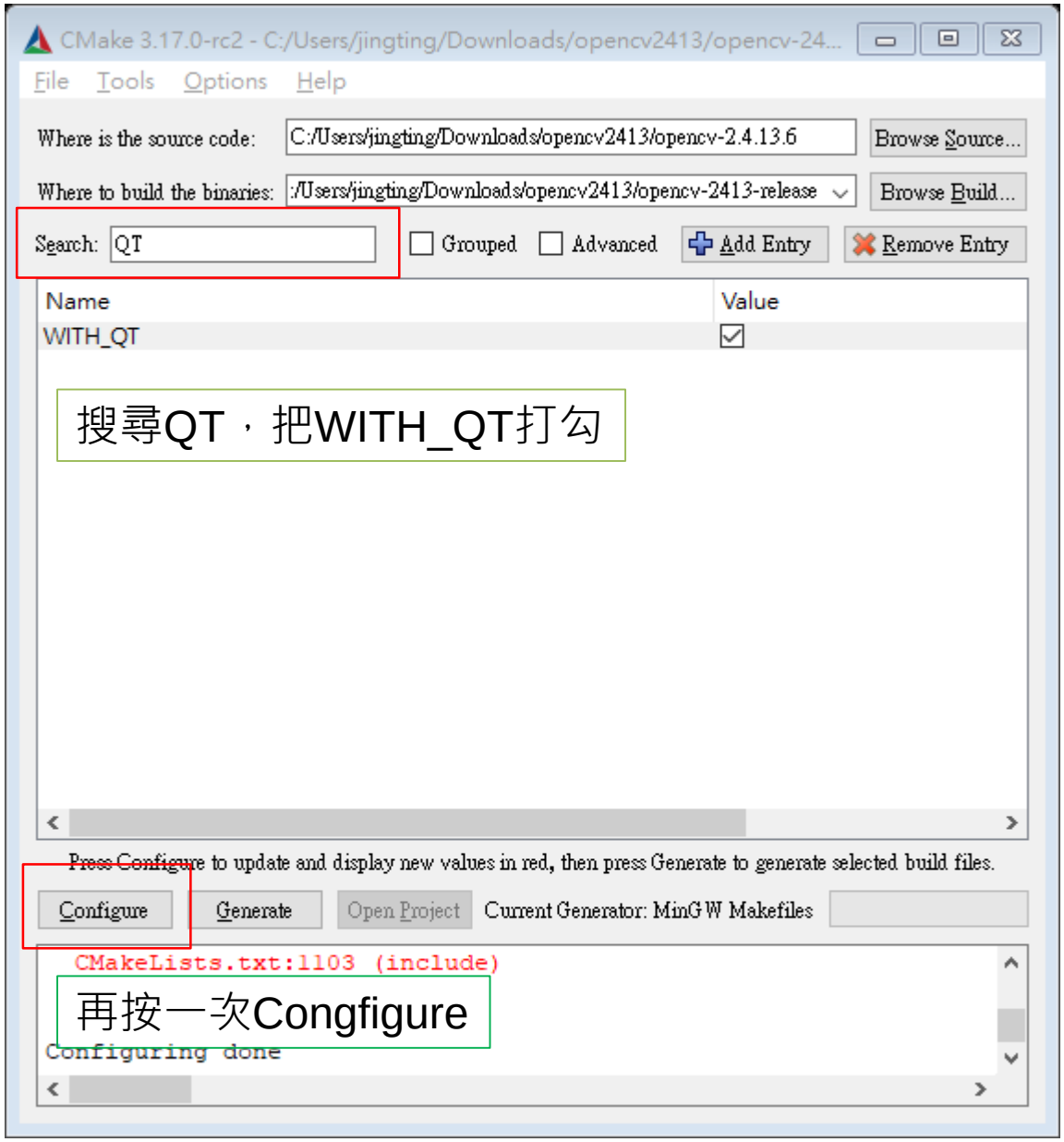
選擇qt當中MinGW所提供的gcc.exe和g++.exe

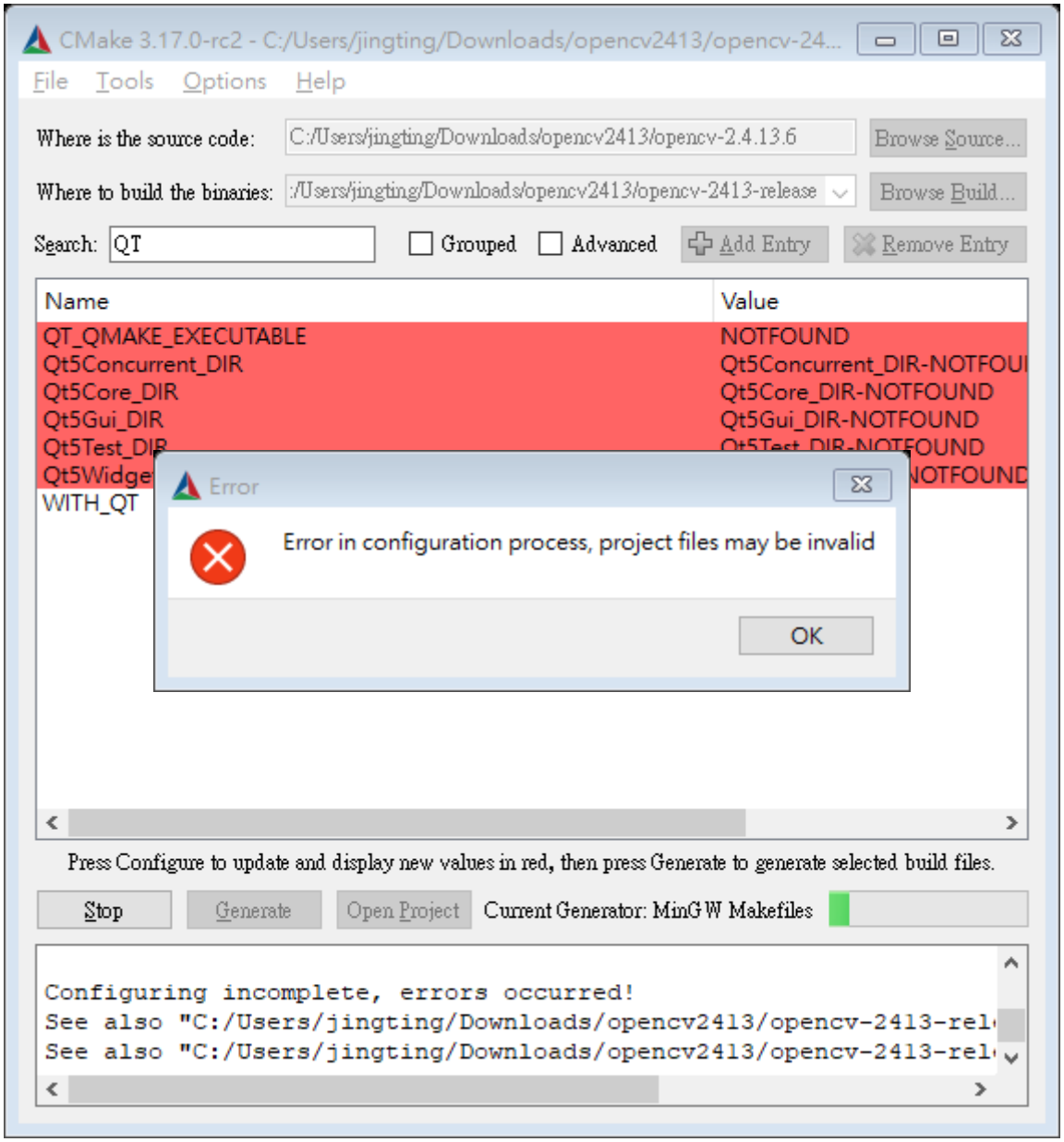
c:/Qt/Qt5.9.1/**Tools**/mingw530_32/

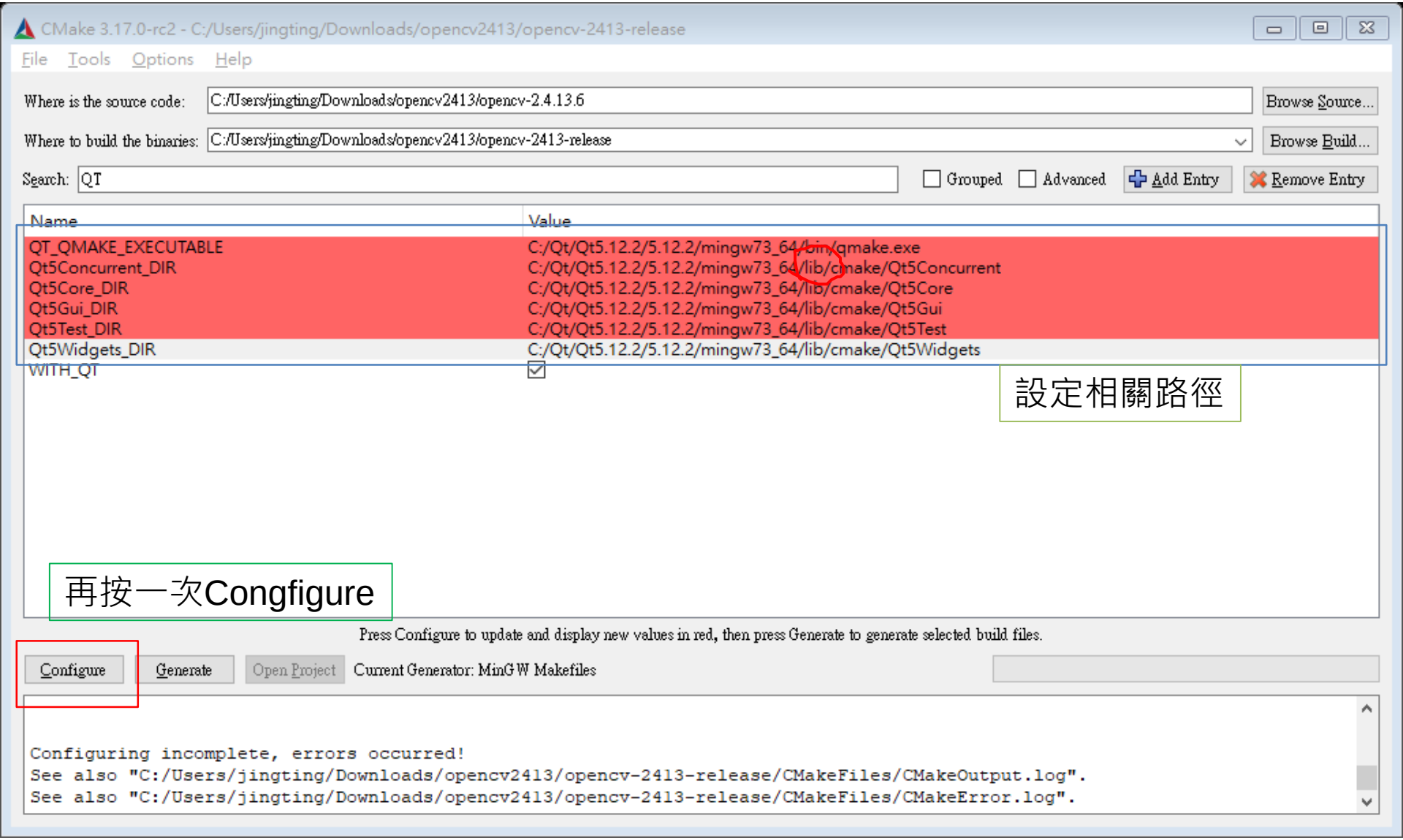
1.4 調整設定


CMake 3.17.0-rc2 - F:/opencv2413/opencv2413Release
File Tools Options Help
Where is the source code: F:/opencv2413/opencv-2.4.13.6 Browse Source...
Where to build the binaries: F:/opencv2413/opencv2413Release Browse Build...
Search: Grouped Advanced Add Entry Remove Entry
Name Value
CMAKE_CONFIGURATION_TYPES Debug;Release
CMAKE_INSTALL_PREFIX F:/opencv2413/opencv2413Release/install
CMAKE_MAKE_PROGRAM CMAKE_MAKE_PROGRAM-NOTFOUND
CMAKE_CXX_COMPILER C:/Qt/Qt5.9.1/Tools/mingw530_32/bin/g++...
CMAKE_C_COMPILER C:/Qt/Qt5.9.1/Tools/mingw530_32/bin/gcc....
選擇mingw的mingw530_32/bin/mingw32-make.exe
(在mingw的資料夾當中)
再按一次Congfigure
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Configure Generate Open Project Current Generator: MinGW Makefiles
CMake Error: CMake was unable to find a build program correspond
CMake Error: CMake was unable to find a build program correspond
Configuring incomplete, errors occurred!

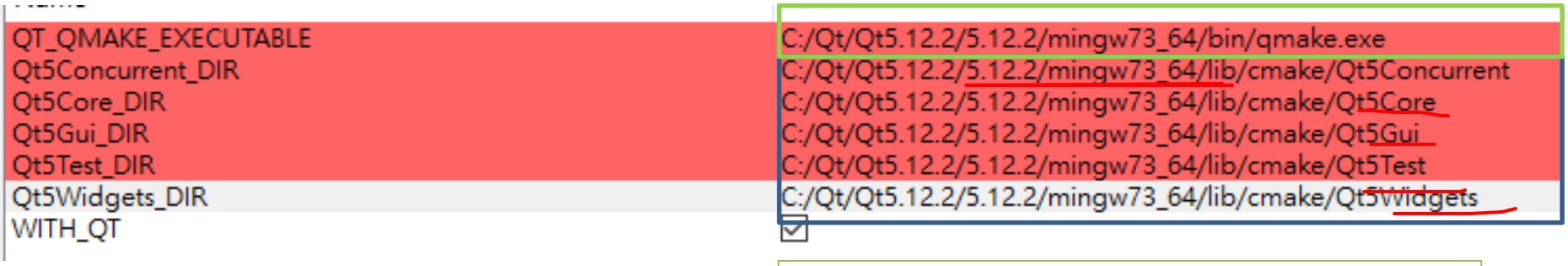

CMake 3.17.0-rc2 - C:/Users/jingting/Downloads/opencv2413/opencv-24...
File Tools Options Help
Where is the source code: C:/Users/jingting/Downloads/opencv2413/opencv-2.4.13.6 Browse Source...
Where to build the binaries: :/Users/jingting/Downloads/opencv2413/opencv-2413-release Browse Build...
Search: Grouped Advanced Add Entry Remove Entry
Name Value
CMAKE_C_COMPILER C:/Qt/Qt5.12.2/Tools/mingw7
CMAKE_CXX_COMPILER C:/Qt/Qt5.12.2/Tools/mingw7
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Stop Generate Open Project Current Generator: MinGW Makefiles
Performing Test HAVE_CXX_WERROR_ADDRESS - Success
Performing Test HAVE_C_WERROR_ADDRESS
Performing Test HAVE_C_WERROR_ADDRESS - Success
Performing Test HAVE_CXX_WERROR_SEQUENCE_POINT


CMake 3.17.0-rc2 - C:/Users/jingting/Downloads/opencv2413/opencv-24...
File Tools Options Help
Where is the source code: C:/Users/jingting/Downloads/opencv2413/opencv-2.4.13.6 Browse Source...
Where to build the binaries: :/Users/jingting/Downloads/opencv2413/opencv-2413-release Browse Build...
Search: QT Grouped Advanced Add Entry Remove Entry
Name Value
WITH_QT
搜尋QT，把WITH_QT打勾
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Configure Generate Open Project Current Generator: MinGW Makefiles
CMakeLists.txt:1103 (include)
再按一次Congfigure
Configuring done

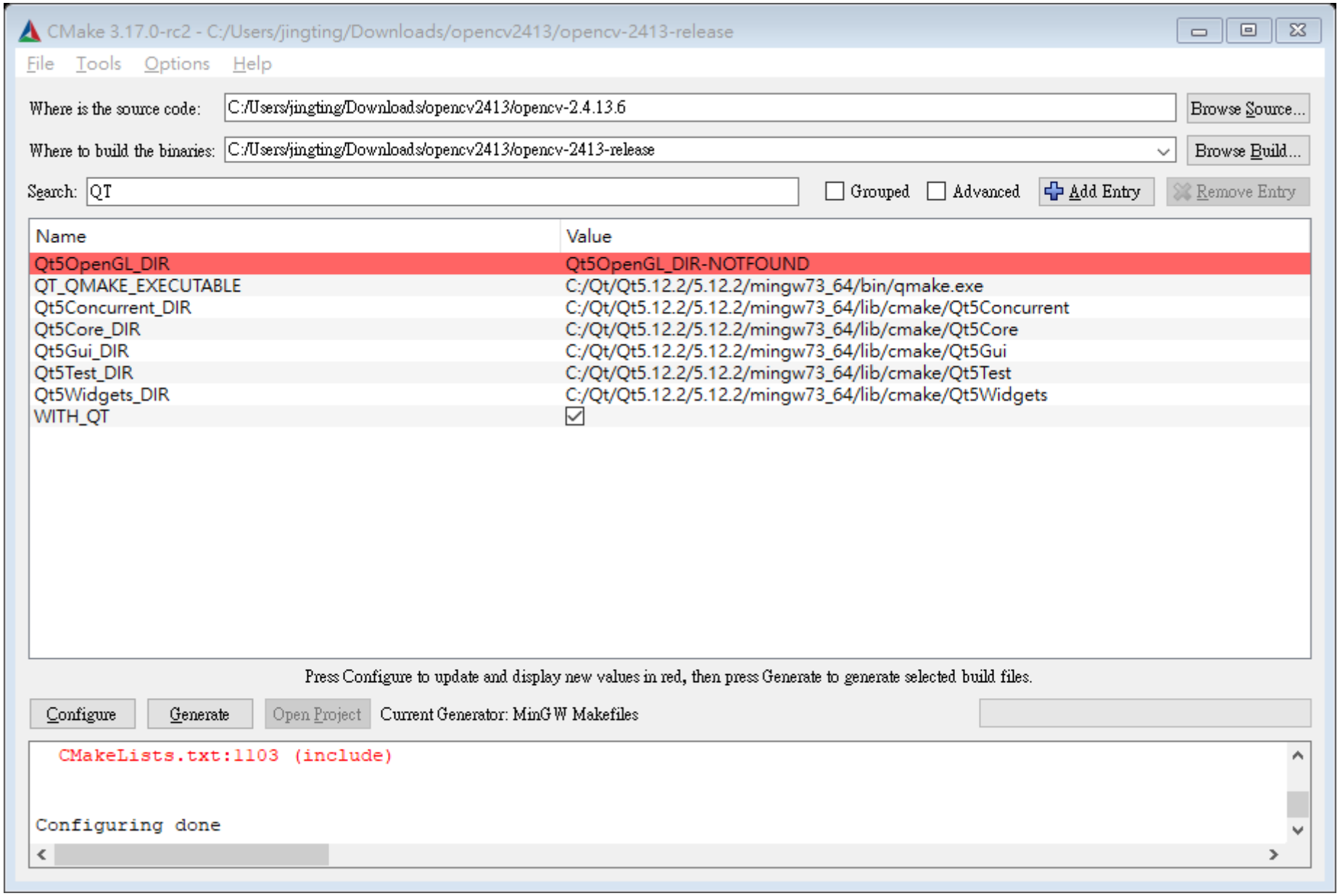

CMake 3.17.0-rc2 - C:/Users/jingting/Downloads/opencv2413/opencv-24...
File Tools Options Help
Where is the source code: C:/Users/jingting/Downloads/opencv2413/opencv-2.4.13.6 Browse Source...
Where to build the binaries: :/Users/jingting/Downloads/opencv2413/opencv-2413-release Browse Build...
Search: QT Grouped Advanced Add Entry Remove Entry
Name Value
QT_QMAKE_EXECUTABLE NOTFOUND
Qt5Concurrent_DIR Qt5Concurrent_DIR-NOTFOUI
Qt5Core_DIR Qt5Core_DIR-NOTFOUND
Qt5Gui_DIR Qt5Gui_DIR-NOTFOUND
Qt5Test_DIR
Qt5Widge
WITH_QT
Error
Error in configuration process, project files may be invalid
OK
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Stop Generate Open Project Current Generator: MinGW Makefiles
Configuring incomplete, errors occurred!
See also "C:/Users/jingting/Downloads/opencv2413/opencv-2413-rel
See also "C:/Users/jingting/Downloads/opencv2413/opencv-2413-rel

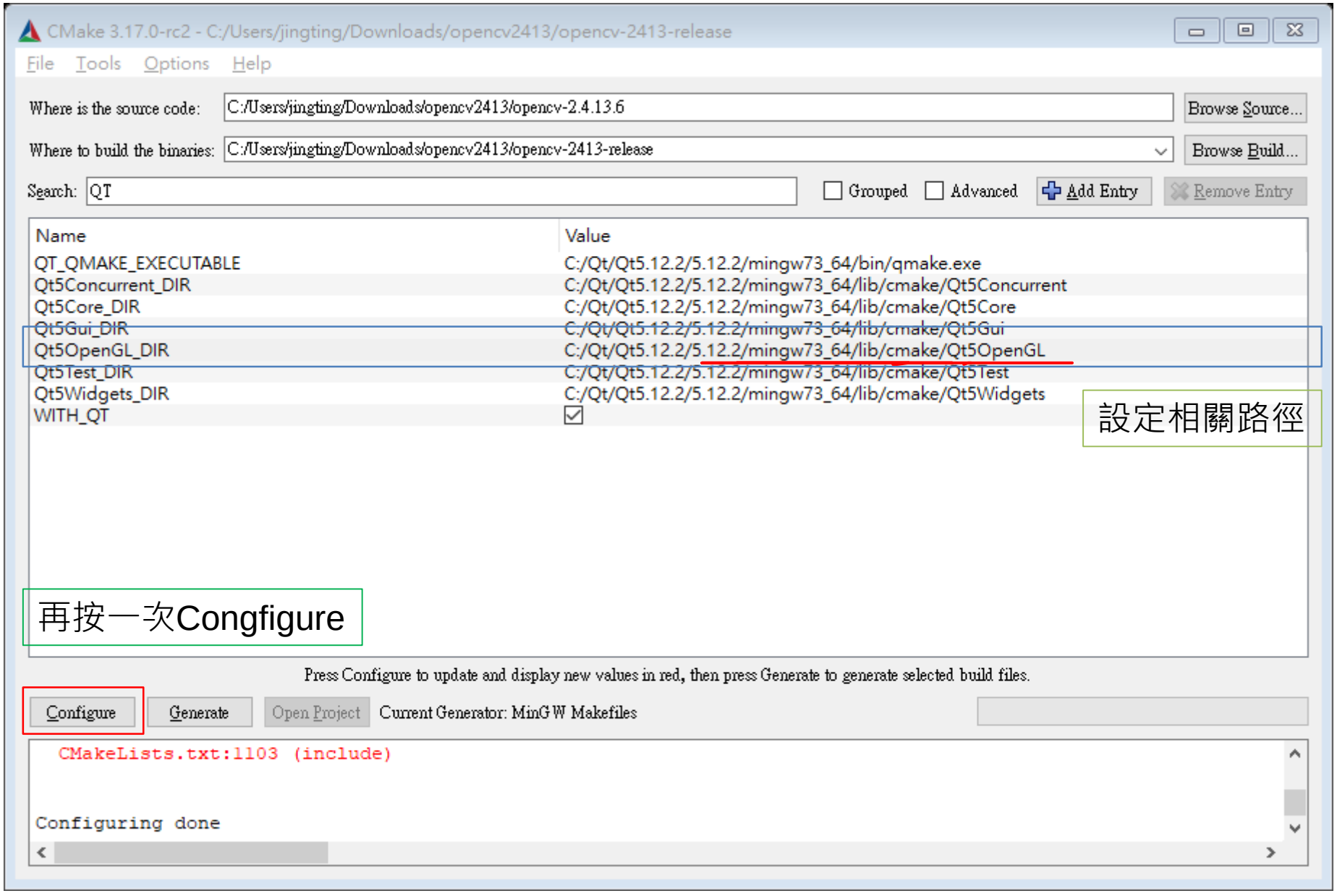

CMake 3.17.0-rc2 - C:/Users/jingting/Downloads/opencv2413/opencv-2413-release
File Tools Options Help
Where is the source code: C:/Users/jingting/Downloads/opencv2413/opencv-2.4.13.6
Browse Source...
Where to build the binaries: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release
Browse Build...
Search: QT
Grouped
Advanced
Add Entry
Remove Entry
Name
Value
QT_QMAKE_EXECUTABLE C:/Qt/Qt5.12.2/5.12.2/mingw73_64/bin/qmake.exe
Qt5Concurrent_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Concurrent
Qt5Core_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Core
Qt5Gui_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Gui
Qt5Test_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Test
Qt5Widgets_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Widgets
WITH_QT
設定相關路徑
再按一次Congfigure
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Configure
Generate
Open Project
Current Generator: MinGW Makefiles
Configuring incomplete, errors occurred!
See also "C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/CMakeFiles/CMakeOutput.log".
See also "C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/CMakeFiles/CMakeError.log".

c:/Qt/Qt5.9.1/mingw53_32/bin/qmake.exe

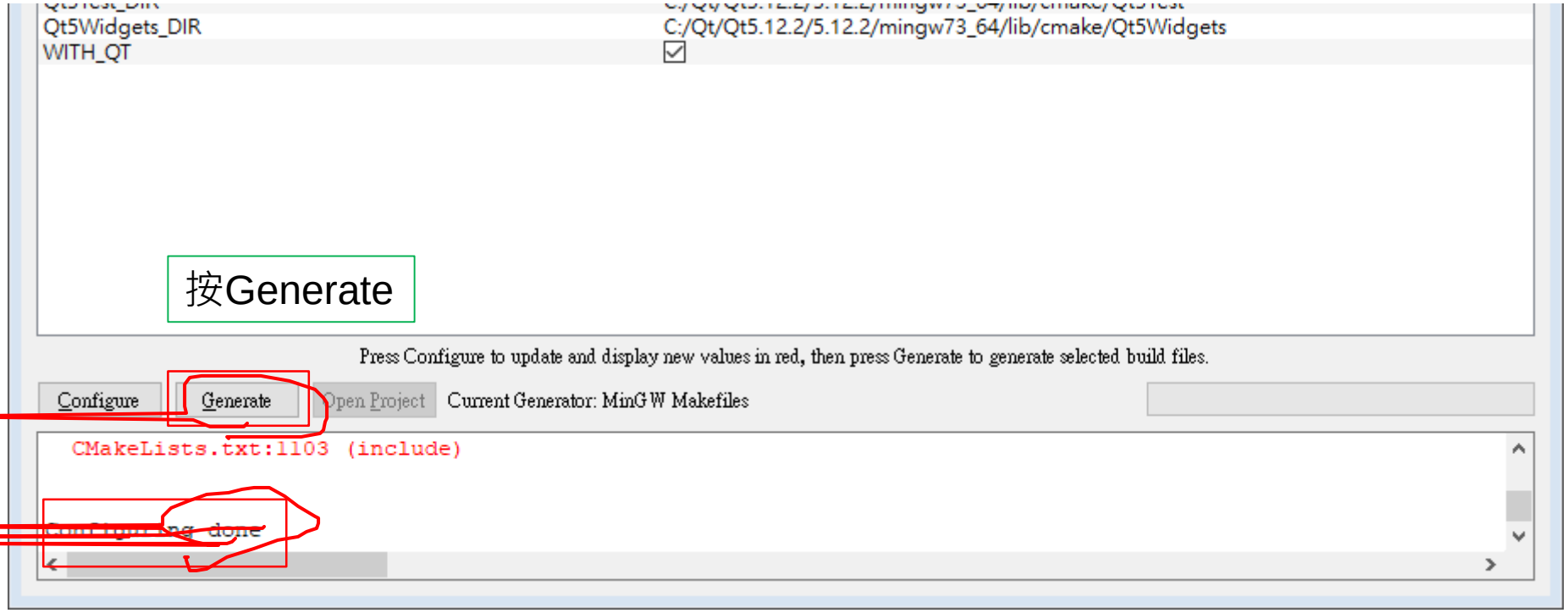


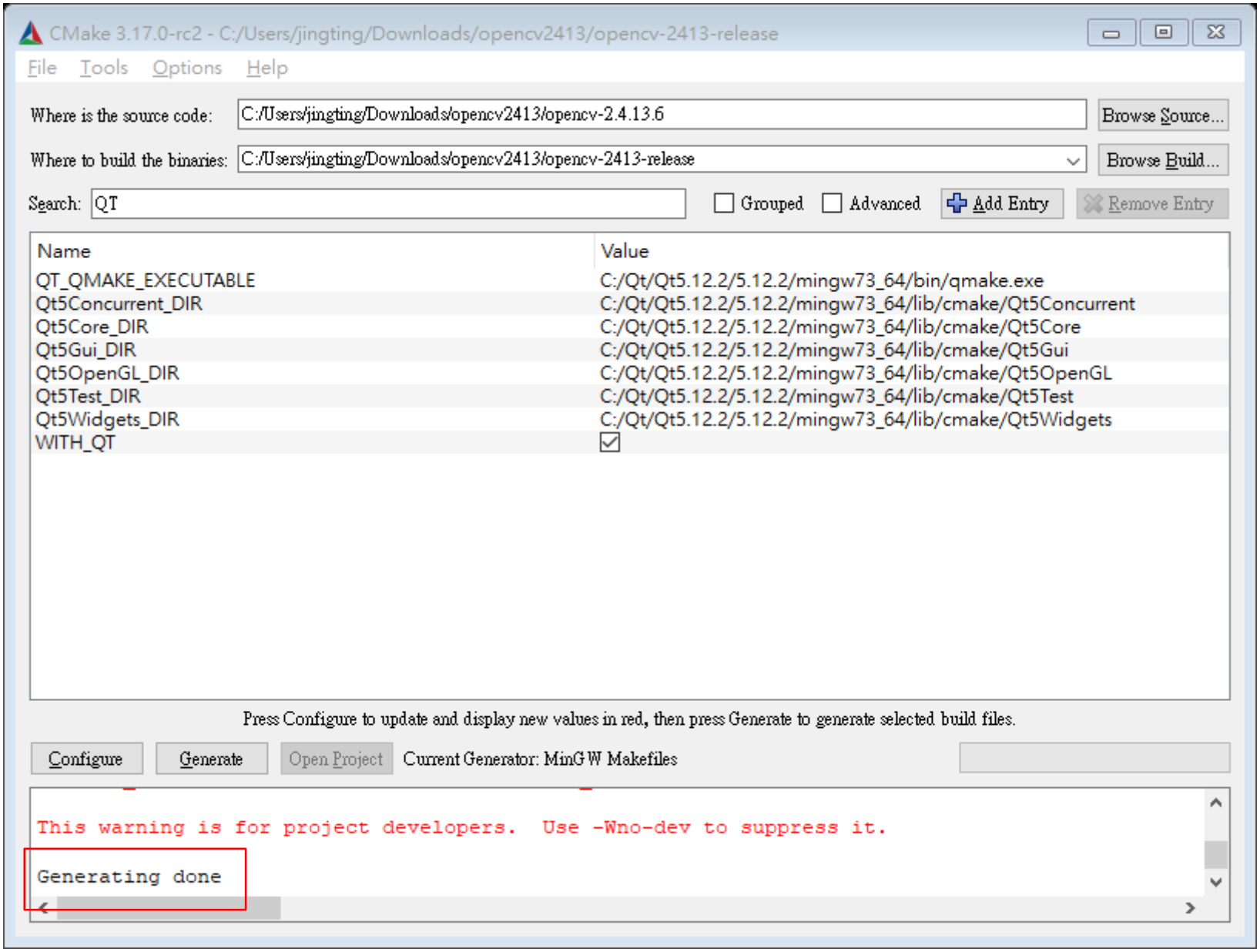
c:/Qt/Qt5.9.1/mingw53_32/lib/camke/


CMake 3.17.0-rc2 - C:/Users/jingting/Downloads/opencv2413/opencv-2413-release
File Tools Options Help
Where is the source code: C:/Users/jingting/Downloads/opencv2413/opencv-2.4.13.6 Browse Source...
Where to build the binaries: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release Browse Build...
Search: QT Grouped Advanced Add Entry Remove Entry
Name Value
Qt5OpenGL_DIR Qt5OpenGL_DIR-NOTFOUND
QT_QMAKE_EXECUTABLE C:/Qt/Qt5.12.2/5.12.2/mingw73_64/bin/qmake.exe
Qt5Concurrent_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Concurrent
Qt5Core_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Core
Qt5Gui_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Gui
Qt5Test_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Test
Qt5Widgets_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Widgets
WITH_QT
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Configure Generate Open Project Current Generator: MinGW Makefiles
CMakeLists.txt:1103 (include)
Configuring done

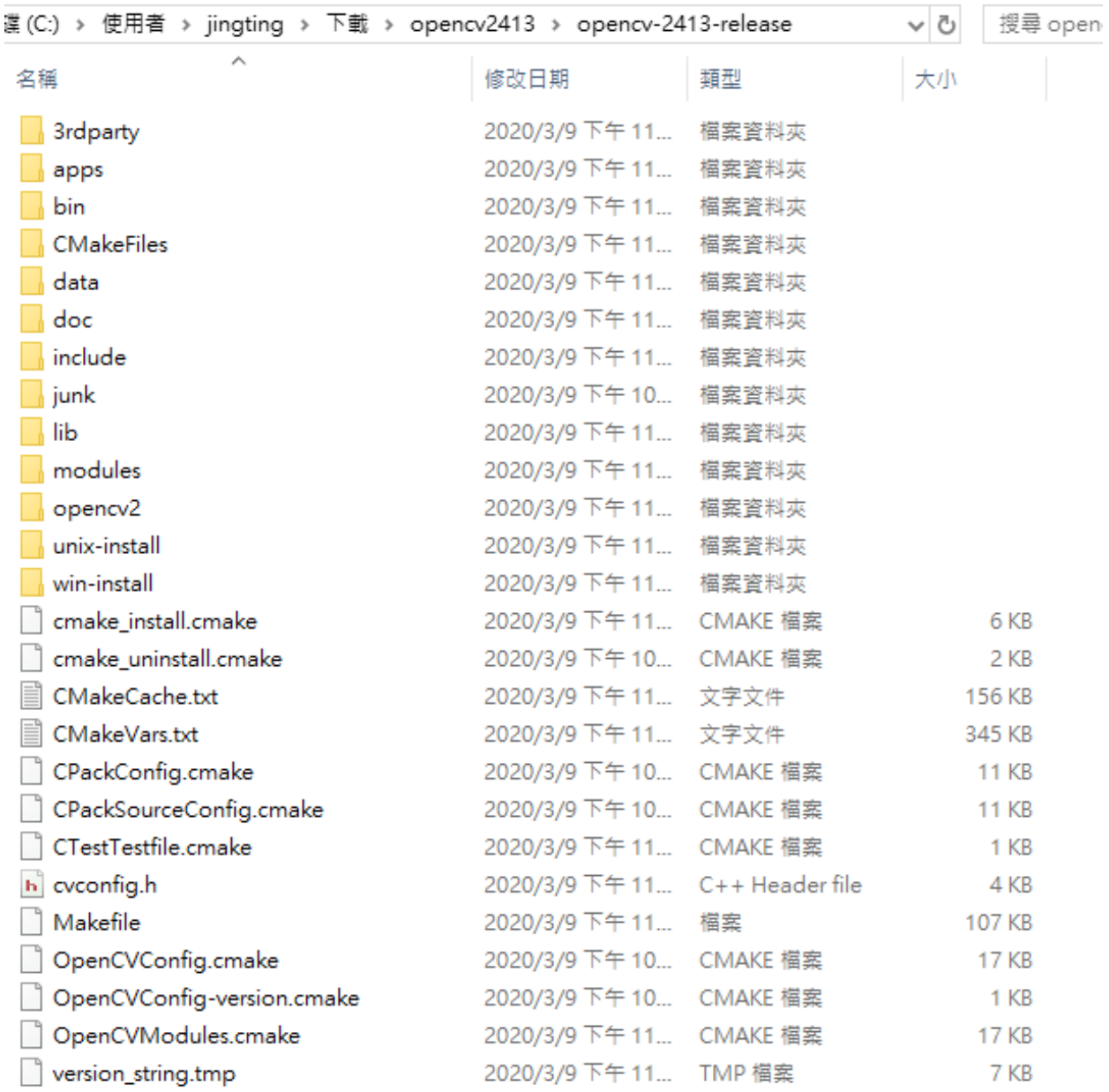

CMake 3.17.0-rc2 - C:/Users/jingting/Downloads/opencv2413/opencv-2413-release
File Tools Options Help
Where is the source code: C:/Users/jingting/Downloads/opencv2413/opencv-2.4.13.6
Browse Source...
Where to build the binaries: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release
Browse Build...
Search: QT
Grouped
Advanced
Add Entry
Remove Entry
Name
Value
QT_QMAKE_EXECUTABLE C:/Qt/Qt5.12.2/5.12.2/mingw73_64/bin/qmake.exe
Qt5Concurrent_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Concurrent
Qt5Core_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Core
Qt5Gui_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Gui
Qt5OpenGL_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5OpenGL
Qt5Test_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Test
Qt5Widgets_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Widgets
WITH_QT
設定相關路徑
再按一次Congfigure
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Configure
Generate
Open Project
Current Generator: MinGW Makefiles
CMakeLists.txt:1103 (include)
Configuring done

1.5 產生makefiles




CMake 3.17.0-rc2 - C:/Users/jingting/Downloads/opencv2413/opencv-2413-release
File Tools Options Help
Where is the source code: C:/Users/jingting/Downloads/opencv2413/opencv-2.4.13.6
Browse Source...
Where to build the binaries: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release
Browse Build...
Search: QT
Grouped
Advanced
Add Entry
Remove Entry
Name
Value
QT_QMAKE_EXECUTABLE C:/Qt/Qt5.12.2/5.12.2/mingw73_64/bin/qmake.exe
Qt5Concurrent_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Concurrent
Qt5Core_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Core
Qt5Gui_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Gui
Qt5OpenGL_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5OpenGL
Qt5Test_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Test
Qt5Widgets_DIR C:/Qt/Qt5.12.2/5.12.2/mingw73_64/lib/cmake/Qt5Widgets
WITH_QT
Press Configure to update and display new values in red, then press Generate to generate selected build files.
Configure
Generate
Open Project
Current Generator: MinGW Makefiles
This warning is for project developers. Use -Wno-dev to suppress it.
Generating done

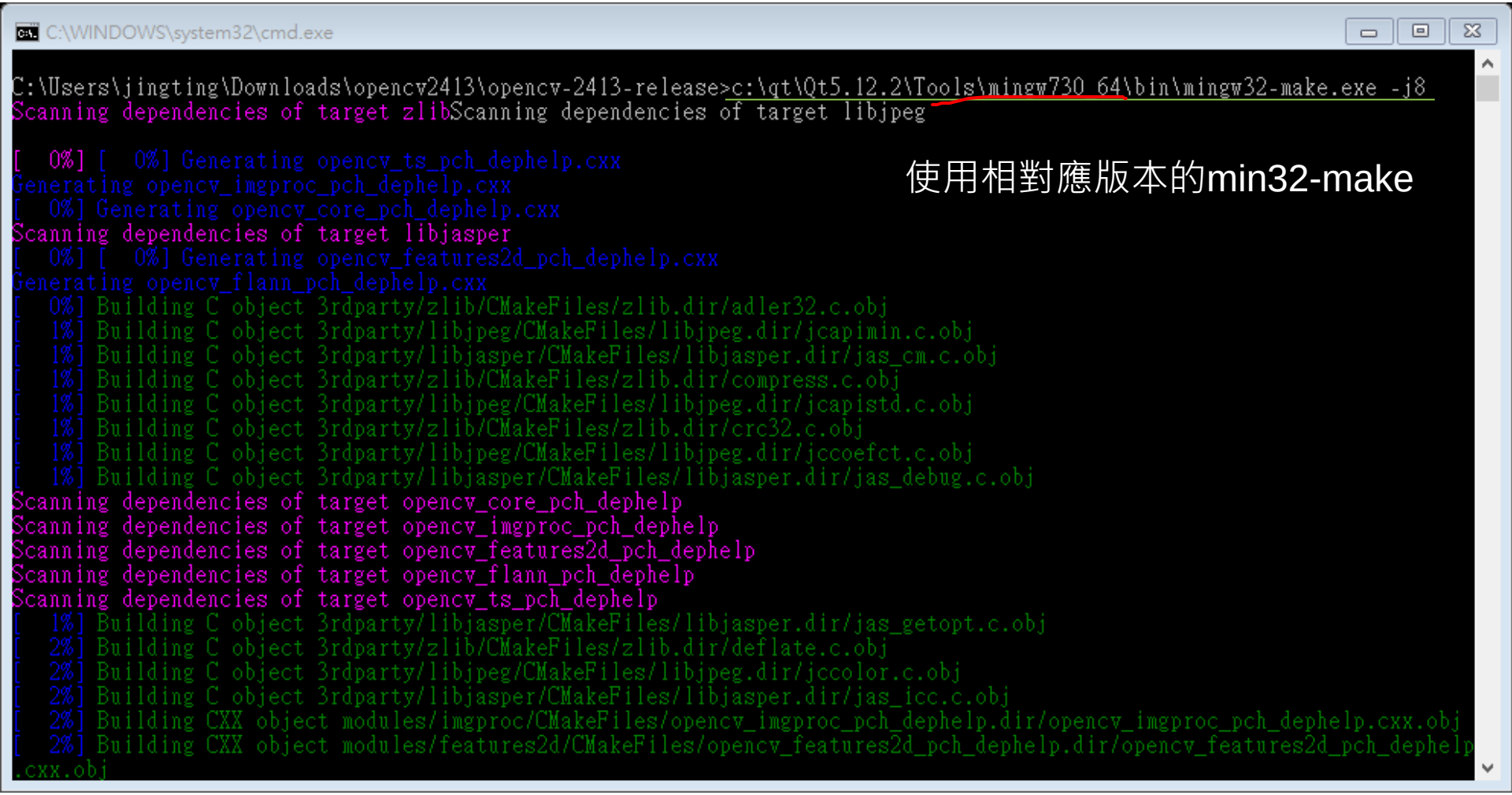
產生出來的資料

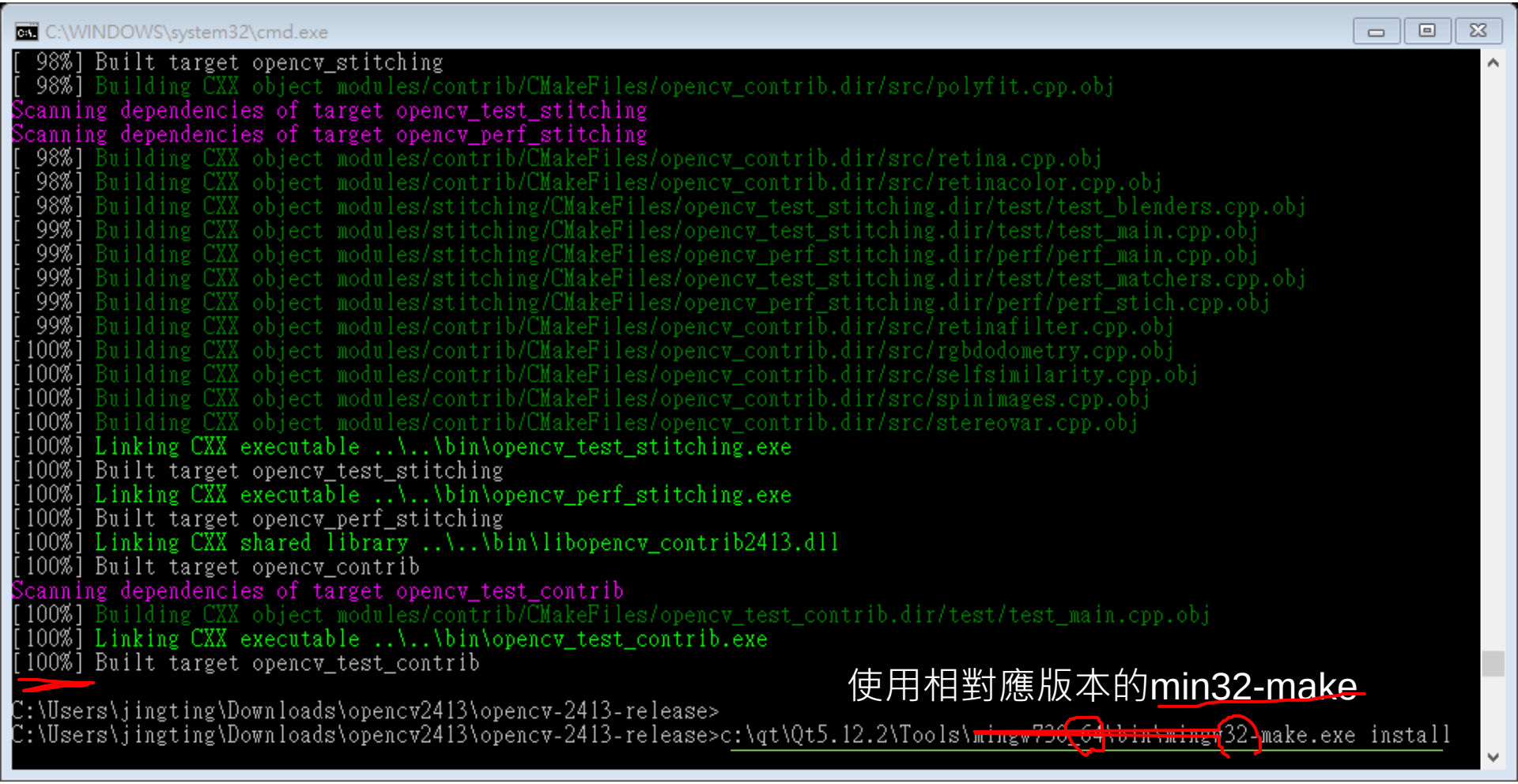

(C:) › 使用者 › jingting › 下載 › opencv2413 › opencv-2413-release
搜尋 open
名稱
修改日期
類型
大小
3rdparty 2020/3/9 下午 11... 檔案資料夾
apps 2020/3/9 下午 11... 檔案資料夾
bin 2020/3/9 下午 11... 檔案資料夾
CMakeFiles 2020/3/9 下午 11... 檔案資料夾
data 2020/3/9 下午 11... 檔案資料夾
doc 2020/3/9 下午 11... 檔案資料夾
include 2020/3/9 下午 11... 檔案資料夾
junk 2020/3/9 下午 10... 檔案資料夾
lib 2020/3/9 下午 11... 檔案資料夾
modules 2020/3/9 下午 11... 檔案資料夾
opencv2 2020/3/9 下午 11... 檔案資料夾
unix-install 2020/3/9 下午 11... 檔案資料夾
win-install 2020/3/9 下午 11... 檔案資料夾
cmake_install.cmake 2020/3/9 下午 11... CMAKE 檔案 6 KB
cmake_uninstall.cmake 2020/3/9 下午 10... CMAKE 檔案 2 KB
CMakeCache.txt 2020/3/9 下午 11... 文字文件 156 KB
CMakeVars.txt 2020/3/9 下午 11... 文字文件 345 KB
CPackConfig.cmake 2020/3/9 下午 10... CMAKE 檔案 11 KB
CPackSourceConfig.cmake 2020/3/9 下午 10... CMAKE 檔案 11 KB
CTestTestfile.cmake 2020/3/9 下午 11... CMAKE 檔案 1 KB
cvconfig.h 2020/3/9 下午 11... C++ Header file 4 KB
Makefile 2020/3/9 下午 11... 檔案 107 KB
OpenCVConfig.cmake 2020/3/9 下午 10... CMAKE 檔案 17 KB
OpenCVConfig-version.cmake 2020/3/9 下午 10... CMAKE 檔案 1 KB
OpenCVModules.cmake 2020/3/9 下午 11... CMAKE 檔案 17 KB
version_string.tmp 2020/3/9 下午 11... TMP 檔案 7 KB

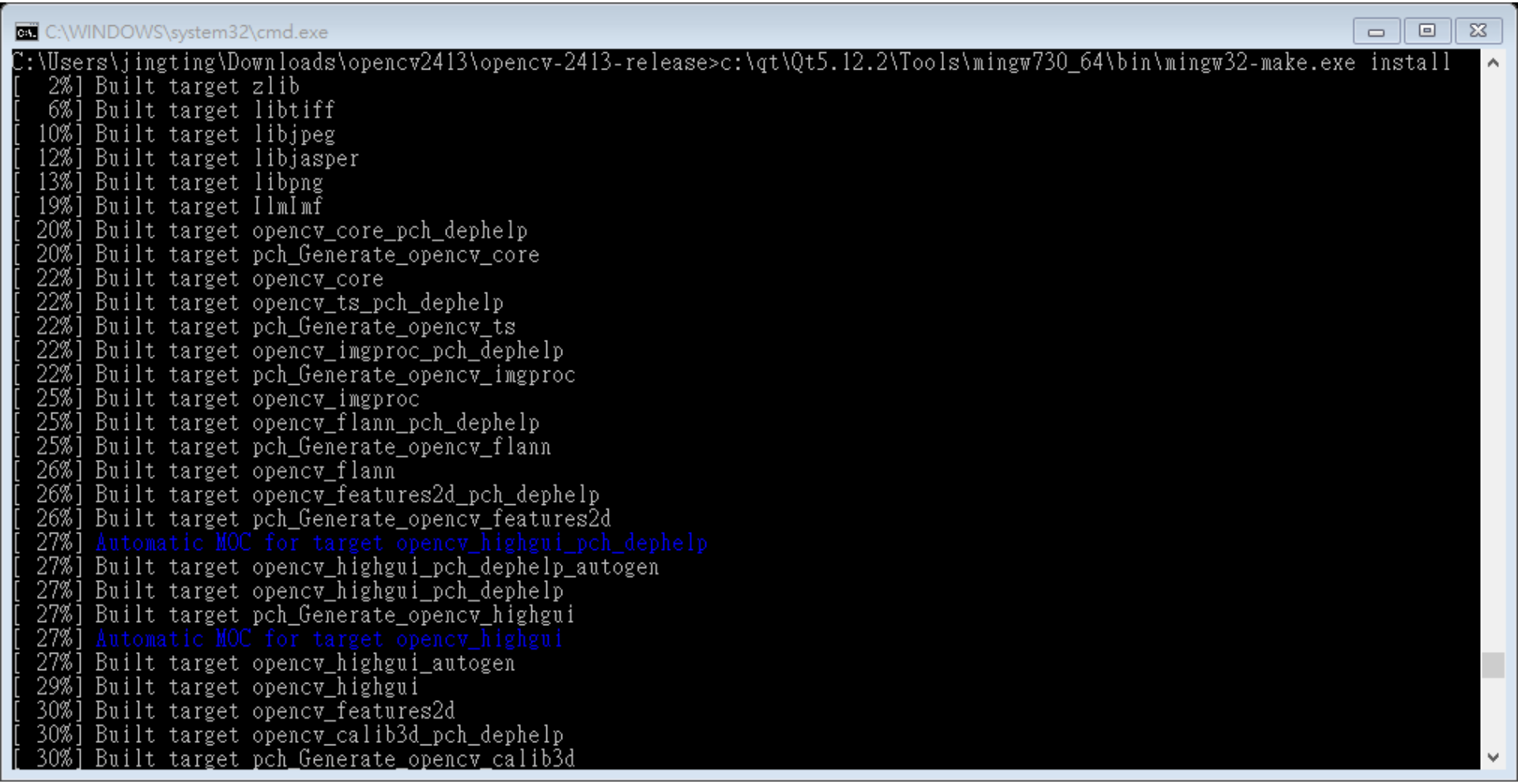
2. make

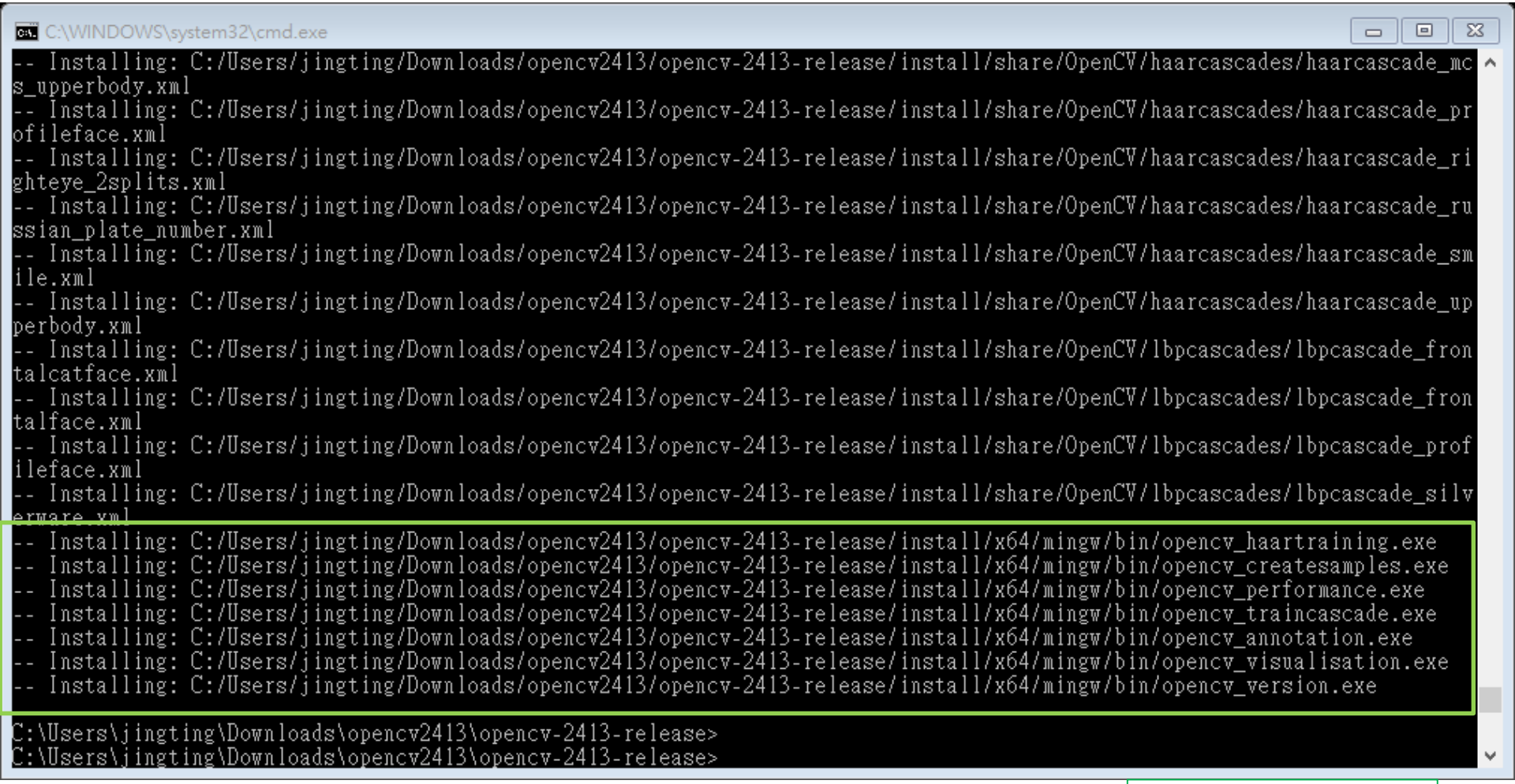
切換至opencv-2413-release 資料夾
執行：

1. ming32-make –j8
2. ming32-make install



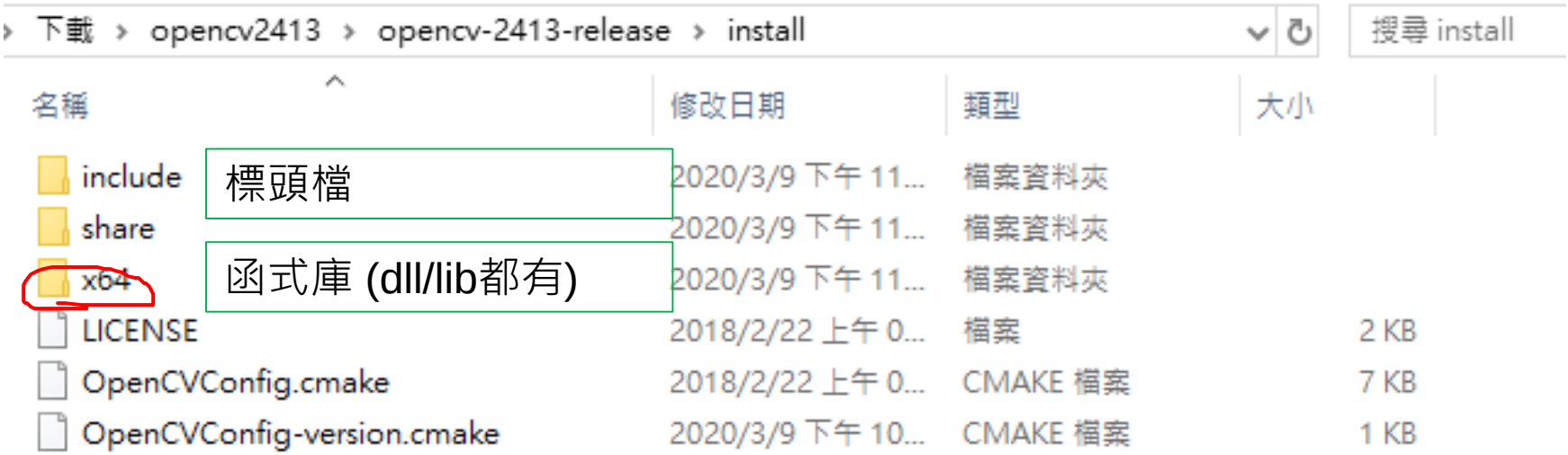

C:\WINDOWS\system32\cmd.exe
[98%] Built target opencv_stitching
[98%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/polyfit.cpp.obj
Scanning dependencies of target opencv_test_stitching
Scanning dependencies of target opencv_perf_stitching
[98%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/retina.cpp.obj
[98%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/retinacolor.cpp.obj
[98%] Building CXX object modules/stitching/CMakeFiles/opencv_test_stitching.dir/test/test_blenders.cpp.obj
[99%] Building CXX object modules/stitching/CMakeFiles/opencv_test_stitching.dir/test/test_main.cpp.obj
[99%] Building CXX object modules/stitching/CMakeFiles/opencv_perf_stitching.dir/perf/perf_main.cpp.obj
[99%] Building CXX object modules/stitching/CMakeFiles/opencv_test_stitching.dir/test/test_matchers.cpp.obj
[99%] Building CXX object modules/stitching/CMakeFiles/opencv_perf_stitching.dir/perf/perf_stich.cpp.obj
[99%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/retinafilter.cpp.obj
[100%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/rgbdodometry.cpp.obj
[100%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/selfsimilarity.cpp.obj
[100%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/spinimages.cpp.obj
[100%] Building CXX object modules/contrib/CMakeFiles/opencv_contrib.dir/src/stereovar.cpp.obj
[100%] Linking CXX executable ..\..\bin\opencv_test_stitching.exe
[100%] Built target opencv_test_stitching
[100%] Linking CXX executable ..\..\bin\opencv_perf_stitching.exe
[100%] Built target opencv_perf_stitching
[100%] Linking CXX shared library ..\..\bin\libopencv_contrib2413.dll
[100%] Built target opencv_contrib
Scanning dependencies of target opencv_test_contrib
[100%] Building CXX object modules/contrib/CMakeFiles/opencv_test_contrib.dir/test/test_main.cpp.obj
[100%] Linking CXX executable ..\..\bin\opencv_test_contrib.exe
[100%] Built target opencv_test_contrib
C:\Users\jingting\Downloads\opencv2413\opencv-2413-release>
C:\Users\jingting\Downloads\opencv2413\opencv-2413-release>c:\qt\Qt5.12.2\Tools\
32-make.exe install
使用相對應版本的min32-make

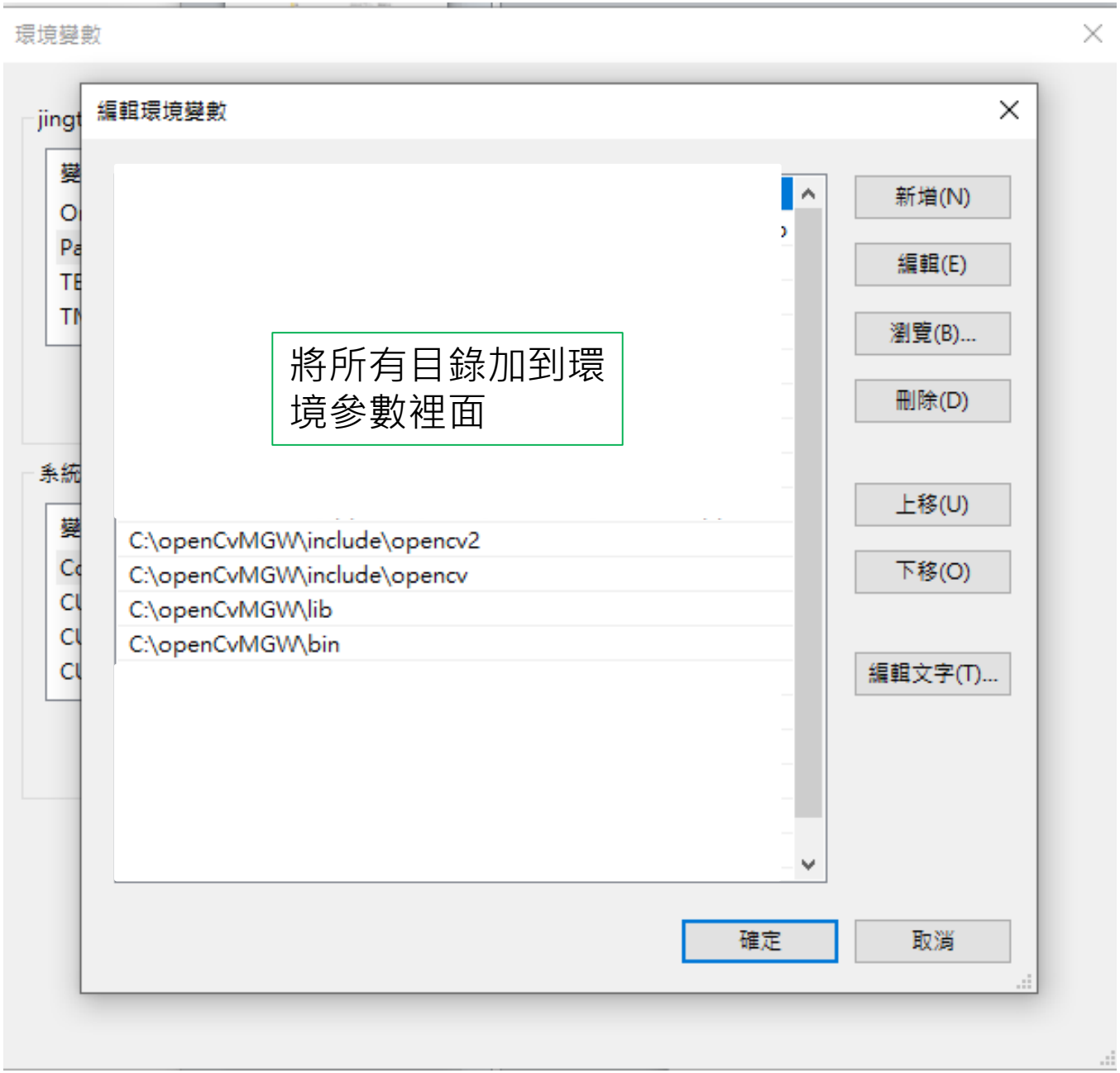

C:\WINDOWS\system32\cmd.exe
C:\Users\jingting\Downloads\opencv2413\opencv-2413-release>c:\qt\Qt5.12.2\Tools\mingw730_64\bin\mingw32-make.exe install
[2%] Built target zlib
[6%] Built target libtiff
[10%] Built target libjpeg
[12%] Built target libjasper
[13%] Built target libpng
[19%] Built target IlmImf
[20%] Built target opencv_core_pch_dephelp
[20%] Built target pch_Generate_opencv_core
[22%] Built target opencv_core
[22%] Built target opencv_ts_pch_dephelp
[22%] Built target pch_Generate_opencv_ts
[22%] Built target opencv_imgproc_pch_dephelp
[22%] Built target pch_Generate_opencv_imgproc
[25%] Built target opencv_imgproc
[25%] Built target opencv_flann_pch_dephelp
[25%] Built target pch_Generate_opencv_flann
[26%] Built target opencv_flann
[26%] Built target opencv_features2d_pch_dephelp
[26%] Built target pch_Generate_opencv_features2d
[27%] Automatic MOC for target opencv_highgui_pch_dephelp
[27%] Built target opencv_highgui_pch_dephelp_autogen
[27%] Built target opencv_highgui_pch_dephelp
[27%] Built target pch_Generate_opencv_highgui
[27%] Automatic MOC for target opencv_highgui
[27%] Built target opencv_highgui_autogen
[29%] Built target opencv_highgui
[30%] Built target opencv_features2d
[30%] Built target opencv_calib3d_pch_dephelp
[30%] Built target pch_Generate_opencv_calib3d


C:\WINDOWS\system32\cmd.exe
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/haarcascades/haarcascade_mcs_upperbody.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/haarcascades/haarcascade_profileface.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/haarcascades/haarcascade_righteye_2splits.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/haarcascades/haarcascade_russian_plate_number.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/haarcascades/haarcascade_smile.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/haarcascades/haarcascade_upperbody.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/lbpcascades/lbpcascade_frontalcatface.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/lbpcascades/lbpcascade_frontalface.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/lbpcascades/lbpcascade_profileface.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/share/OpenCV/lbpcascades/lbpcascade_silverware.xml
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/x64/mingw/bin/opencv_haartraining.exe
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/x64/mingw/bin/opencv_createsamples.exe
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/x64/mingw/bin/opencv_performance.exe
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/x64/mingw/bin/opencv_traincascade.exe
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/x64/mingw/bin/opencv_annotation.exe
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/x64/mingw/bin/opencv_visualisation.exe
-- Installing: C:/Users/jingting/Downloads/opencv2413/opencv-2413-release/install/x64/mingw/bin/opencv_version.exe
C:\Users\jingting\Downloads\opencv2413\opencv-2413-release>
C:\Users\jingting\Downloads\opencv2413\opencv-2413-release>

完成檔案的路徑

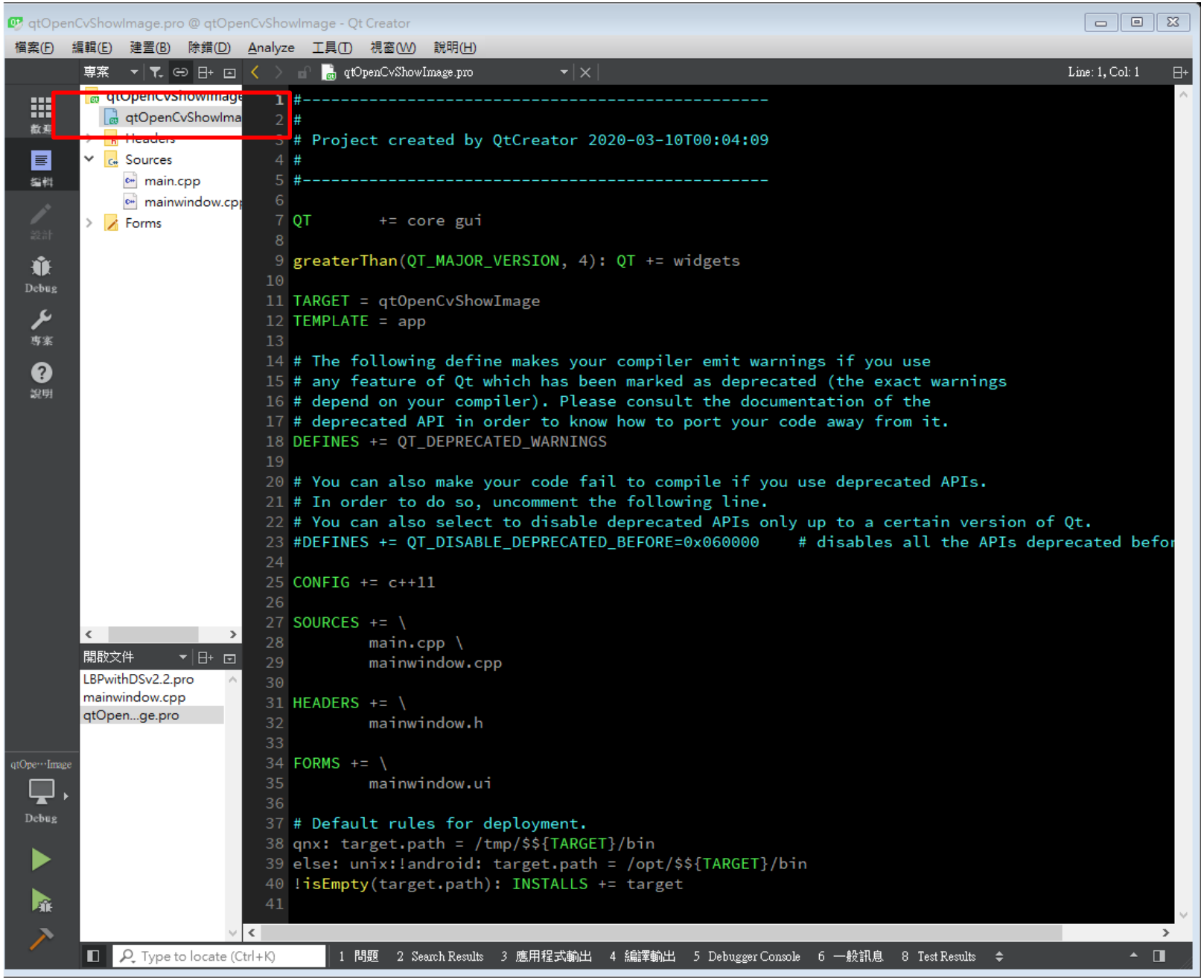
3. 整理檔案並且設定環境參數

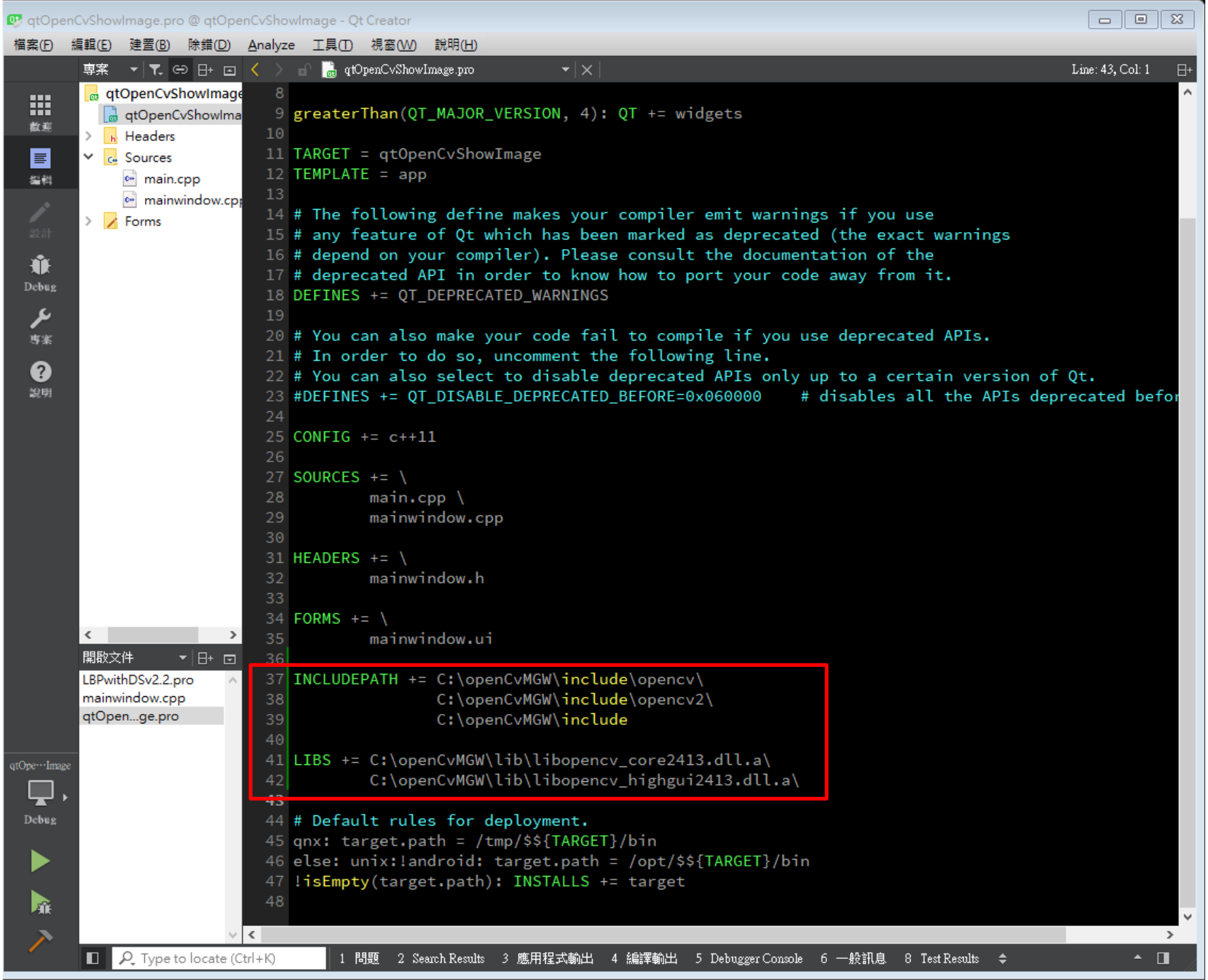



環境變數
編輯環境變數
將所有目錄加到環境參數裡面
C:\openCvMGW\include\opencv2
C:\openCvMGW\include\opencv
C:\openCvMGW\lib
C:\openCvMGW\bin
新增(N)
編輯(E)
瀏覽(B)...
刪除(D)
上移(U)
下移(O)
編輯文字(T)...
確定
取消

測試一下

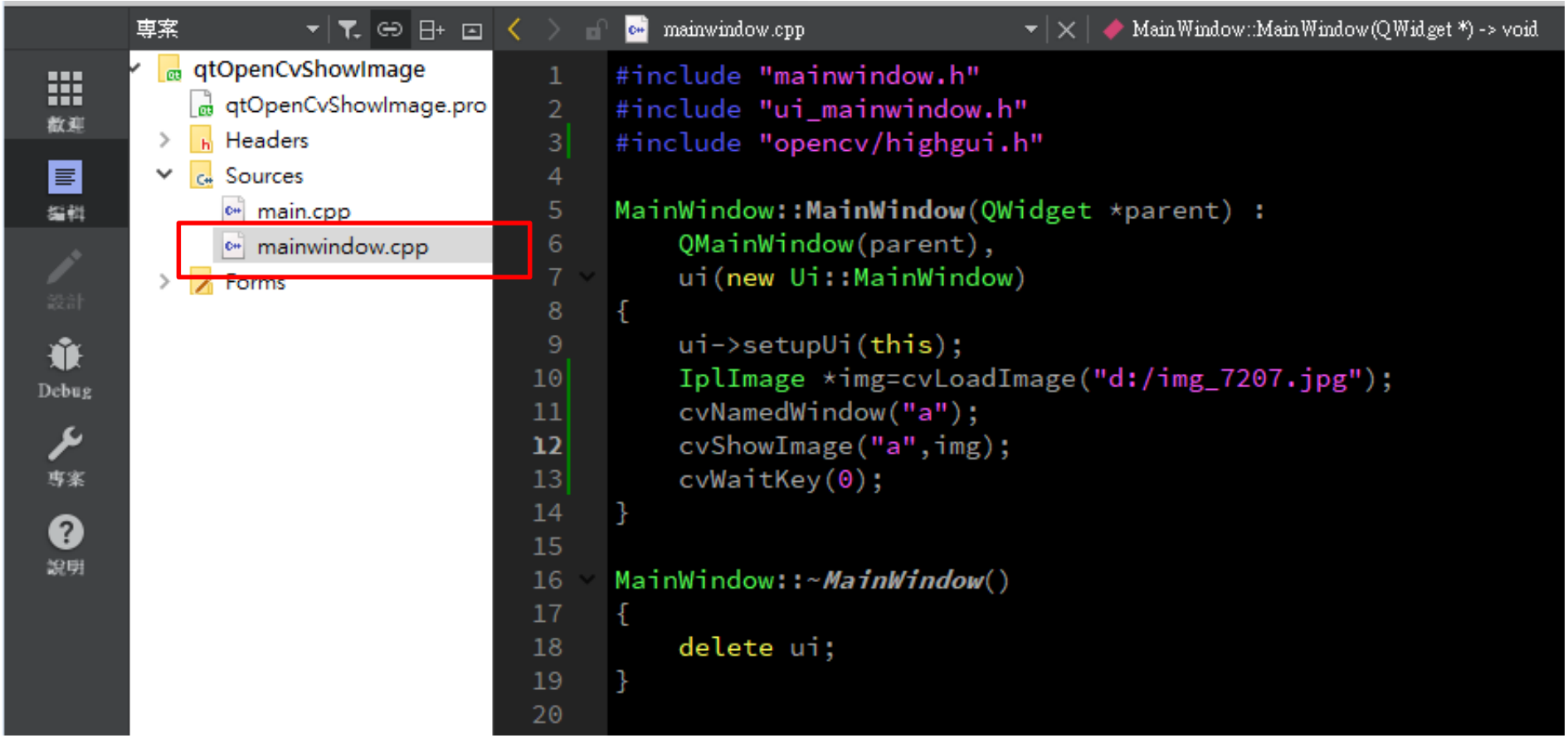
openCv與QT標準流程
開新專案→在專案當中加入opencv的路徑→存檔，開始寫程式


qtOpenCvShowImage.pro @ qtOpenCvShowImage - Qt Creator
檔案(F) 編輯(E) 建置(B) 除錯(D) Analyze 工具(T) 視窗(W) 說明(H)
專案
qtOpenCvShowImage.pro
Line: 1, Col: 1
qtOpenCvShowIma
Headers
Sources
main.cpp
mainwindow.cpp
Forms
#---
#
Project created by QtCreator 2020-03-10T00:04:09
#
#---
QT += core gui
greaterThan(QT_MAJOR_VERSION, 4): QT += widgets
TARGET = qtOpenCvShowImage
TEMPLATE = app
# The following define makes your compiler emit warnings if you use
# any feature of Qt which has been marked as deprecated (the exact warnings
# depend on your compiler). Please consult the documentation of the
# deprecated API in order to know how to port your code away from it.
DEFINES += QT_DEPRECATED_WARNINGS
You can also make your code fail to compile if you use deprecated APIs.
In order to do so, uncomment the following line.
You can also select to disable deprecated APIs only up to a certain version of Qt.
#DEFINES += QT_DISABLE_DEPRECATED_BEFORE=0x060000 # disables all the APIs deprecated befor
CONFIG += c++11
SOURCES += \
main.cpp \
mainwindow.cpp
HEADERS += \
mainwindow.h
FORMS += \
mainwindow.ui
Default rules for deployment.
qnx: target.path = /tmp/$${TARGET}/bin
else: unix:!android: target.path = /opt/$${TARGET}/bin
!isEmpty(target.path): INSTALLS += target
開啟文件
LBPwithDSv2.2.pro
mainwindow.cpp
qtOpen...ge.pro
歡迎
編輯
設計
Debug
專案
說明
Debug
Type to locate (Ctrl+K)
1 問題 2 Search Results 3 應用程式輸出 4 編譯輸出 5 Debugger Console 6 一般訊息 8 Test Results


qtOpenCvShowImage.pro @ qtOpenCvShowImage - Qt Creator
檔案(F) 編輯(E) 建置(B) 除錯(D) Analyze 工具(T) 視窗(W) 說明(H)
專案
qtOpenCvShowImage
qtOpenCvShowIma
Headers
Sources
main.cpp
mainwindow.cpp
Forms
開啟文件
LBPwithDSv2.2.pro
mainwindow.cpp
qtOpen...ge.pro
qtOpenCvShowImage.pro
Line: 43, Col: 1
greaterThan(QT_MAJOR_VERSION, 4): QT += widgets
TARGET = qtOpenCvShowImage
TEMPLATE = app
# The following define makes your compiler emit warnings if you use
# any feature of Qt which has been marked as deprecated (the exact warnings
# depend on your compiler). Please consult the documentation of the
# deprecated API in order to know how to port your code away from it.
DEFINES += QT_DEPRECATED_WARNINGS
You can also make your code fail to compile if you use deprecated APIs.
In order to do so, uncomment the following line.
You can also select to disable deprecated APIs only up to a certain version of Qt.
#DEFINES += QT_DISABLE_DEPRECATED_BEFORE=0x060000 # disables all the APIs deprecated befor
CONFIG += c++11
SOURCES += \
main.cpp \
mainwindow.cpp
HEADERS += \
mainwindow.h
FORMS += \
mainwindow.ui
INCLUDEPATH += C:\openCvMGW\include\opencv\
C:\openCvMGW\include\opencv2\
C:\openCvMGW\include
LIBS += C:\openCvMGW\lib\libopencv_core2413.dll.a\
C:\openCvMGW\lib\libopencv_highgui2413.dll.a\
Default rules for deployment.
qnx: target.path = /tmp/${TARGET}/bin
else: unix:!android: target.path = /opt/${TARGET}/bin
!isEmpty(target.path): INSTALLS += target
Debug
Type to locate (Ctrl+K)
1 問題 2 Search Results 3 應用程式輸出 4 編譯輸出 5 Debugger Console 6 一般訊息 8 Test Results

```
36
37 INCLUDEPATH += C:\openCvMGW\include\opencv\
38                C:\openCvMGW\include\opencv2\
39                C:\openCvMGW\include
40
41 LIBS += C:\openCvMGW\lib\libopencv_core2413.dll.a\
42         C:\openCvMGW\lib\libopencv_highgui2413.dll.a\
```

1. include的路徑，compiler會依照設定的路徑去找相對應的標頭檔
2. lib的路徑，linker會依照所使用到的標頭檔去找相對應的lib


專案
qtOpenCvShowImage
qtOpenCvShowImage.pro
Headers
Sources
main.cpp
mainwindow.cpp
Forms
mainwindow.cpp
MainWindow::MainWindow(QWidget *) -> void
歡迎
編輯
設計
Debug
專案
說明
#include "mainwindow.h"
#include "ui_mainwindow.h"
#include "opencv/highgui.h"
MainWindow::MainWindow(QWidget *parent) :
QMainWindow(parent),
ui(new Ui::MainWindow)
{
ui->setupUi(this);
IplImage *img=cvLoadImage("d:/img_7207.jpg");
cvNamedWindow("a");
cvShowImage("a",img);
cvWaitKey(0);
}
MainWindow::~MainWindow()
{
delete ui;
}

開一張影像

```
3   #include "opencv/highgui.h"
4
5   MainWindow::MainWindow(QWidget *parent) :
6       QMainWindow(parent),
7       ui(new Ui::MainWindow)
8   {
9       ui->setupUi(this);
10      IplImage *img=cvLoadImage("d:/img_7207.jpg");
11      cvNamedWindow("a");
12      cvShowImage("a",img);
13      cvWaitKey(0);
14  }
```

開一個視訊(可以從檔案或是攝影機開啟)

```
3  #include "opencv/highgui.h"
4
5  MainWindow::MainWindow(QWidget *parent) :
6      QMainWindow(parent),
7      ui(new Ui::MainWindow)
8  {                    ⚠ function 'MainWindow' could be declared with att
9      ui->setupUi(this);
10
11     // CvCapture * cap=cvCreateCameraCapture(0);  // for camera
12     CvCapture *cap=cvCreateFileCapture("d:/showDriving.mp4");
13     IplImage * img;
14     cvNamedWindow("a");
15
16     while(1){
17         img = cvQueryFrame(cap);
18         cvShowImage("a", img);
19         cvWaitKey(33);
20     }
21 }
```