

# 韌體實驗

## VS2015使用介紹

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**BIDAS Technology  
GrounTruth Workshop**  
Computer Vision  
Image Processing  
Edge Computing

# Outline

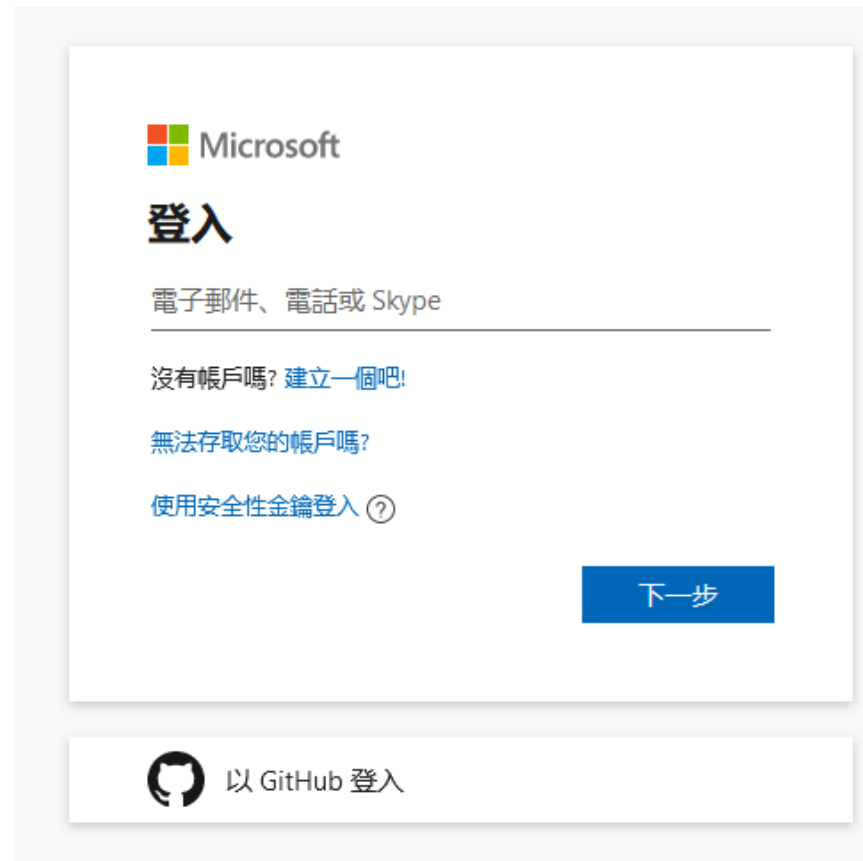
- 下載安裝VS2015
- VS2015 創建專案與cpp檔案
- VS2015 crt secure no warnings
- 放置txt檔案位置
- 執行





# 下載安裝VS2015

- 如果要下載舊版本 Visual Studio
  - ✓ <https://my.visualstudio.com/Downloads/>
  - ✓ 需先註冊Microsoft帳號，註冊後登入
  - ✓ 登入後查詢 Visual Studio 2015 Update 3



The screenshot shows the Microsoft login interface. At the top is the Microsoft logo. Below it is the title '登入' (Login). A text input field is labeled '電子郵件、電話或 Skype' (Email, phone, or Skype). Below the input field are three links: '沒有帳戶嗎? 建立一個吧!' (Don't have an account? Create one!), '無法存取您的帳戶嗎?' (Can't access your account?), and '使用安全性金鑰登入?' (Use a security key to log in?). A blue button labeled '下一步' (Next) is on the right. At the bottom, there is a section for logging in with GitHub, featuring the GitHub logo and the text '以 GitHub 登入'.

# 下載安裝VS2015

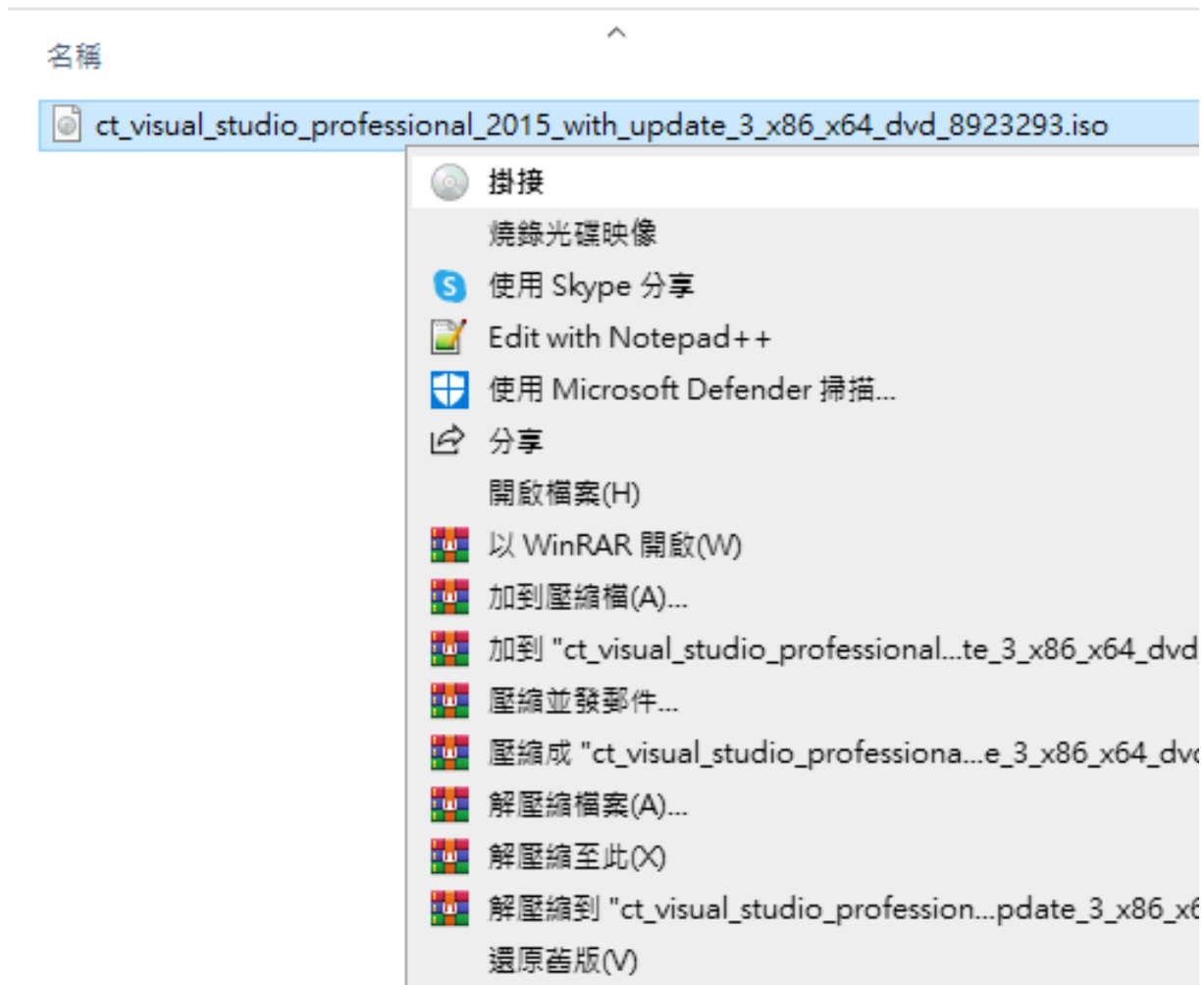
- 搜尋 Visual Studio 2015 Update 3 → 選擇所需版本(Professional版本Get Key為需要序號) → Community為免費 → 選擇Chinese-Traditional DVD → Download

The screenshot shows the Visual Studio 2015 download page. The search bar at the top contains "Visual Studio 2015 Update 3". On the left sidebar, "Visual Studio 2015 Update 3" is selected. The main content area lists several download options. The option "Visual Studio Community 2015 with Update 3" is highlighted, and its "Chinese-Trad..." and "DVD" dropdown menus are selected and highlighted with red boxes. The "Download" button for this option is also visible.

Product Name	Key Requirement	Info	Release Date	Architecture	Language	Format	Action
Remote Tools for Visual Studio 2015 Update 3	No key required	Info	08/Nov/2021	x64	English	EXE	Download
Visual C++ Build Tools for Visual Studio 2015 with Update 3	No key required	Info	27/Apr/2021	x64	English	OTH	Download
Visual Studio 2015 Update 3	No key required	Info	27/Jun/2016	x64	English	DVD	Download
Visual Studio Community 2015 with Update 3	No key required	Info	27/Jun/2016	x64	Chinese-Trad...	DVD	Download
[Trial] Visual Studio Professional 2015 with Update 3	Get Key	Info	28/Jun/2016	x64	English	DVD	Download

# 下載安裝VS2015

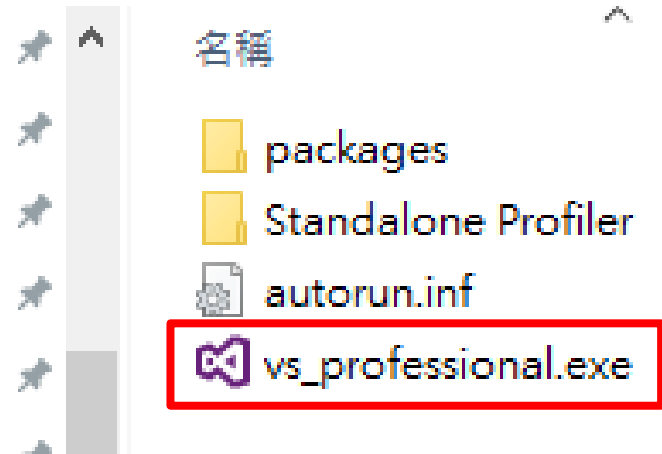
- 下載完成後點選右鍵掛接
  - ✓ 檔名會因下載不同版本不同



# 下載安裝VS2015

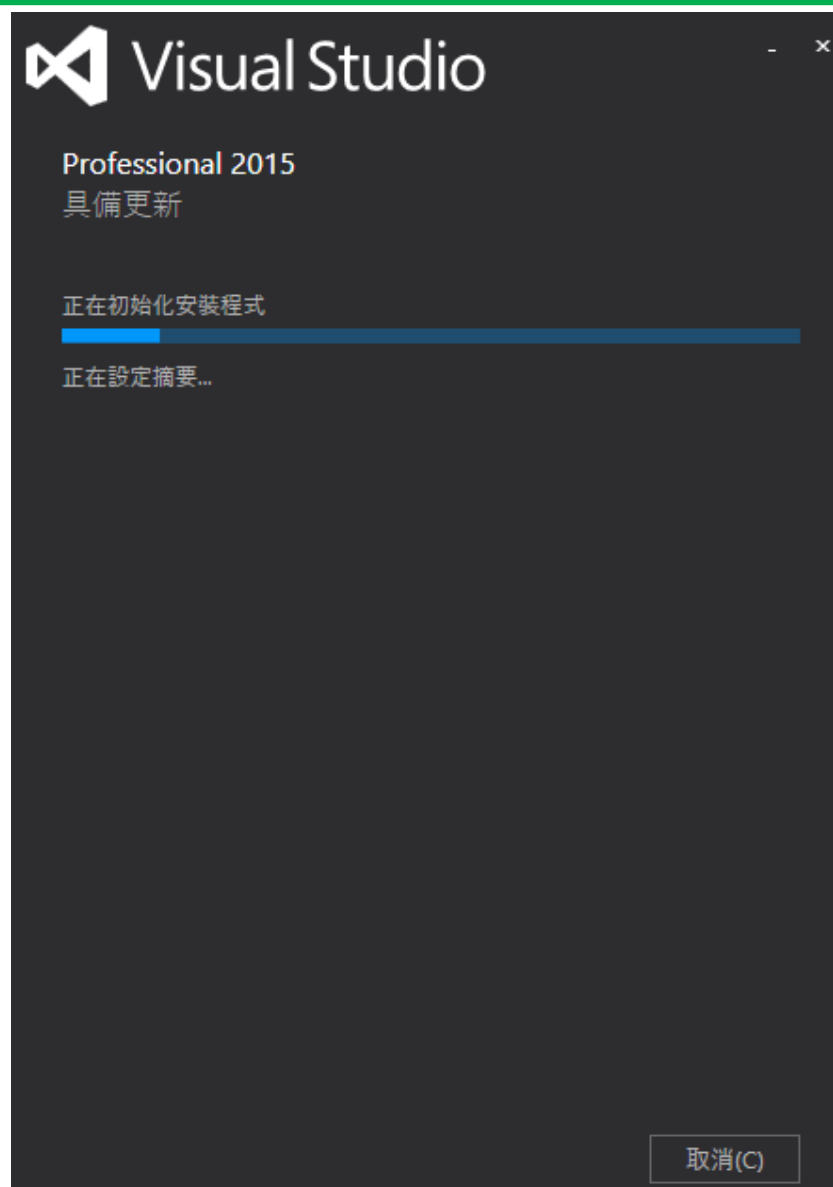
- 掛接後可以在本機>DVD光碟機找到安裝檔案  
→ 點擊vs\_professional.exe(不同版本檔名不同)安裝

本機 > DVD 光碟機 (H:) VS2015\_PRO\_CHT



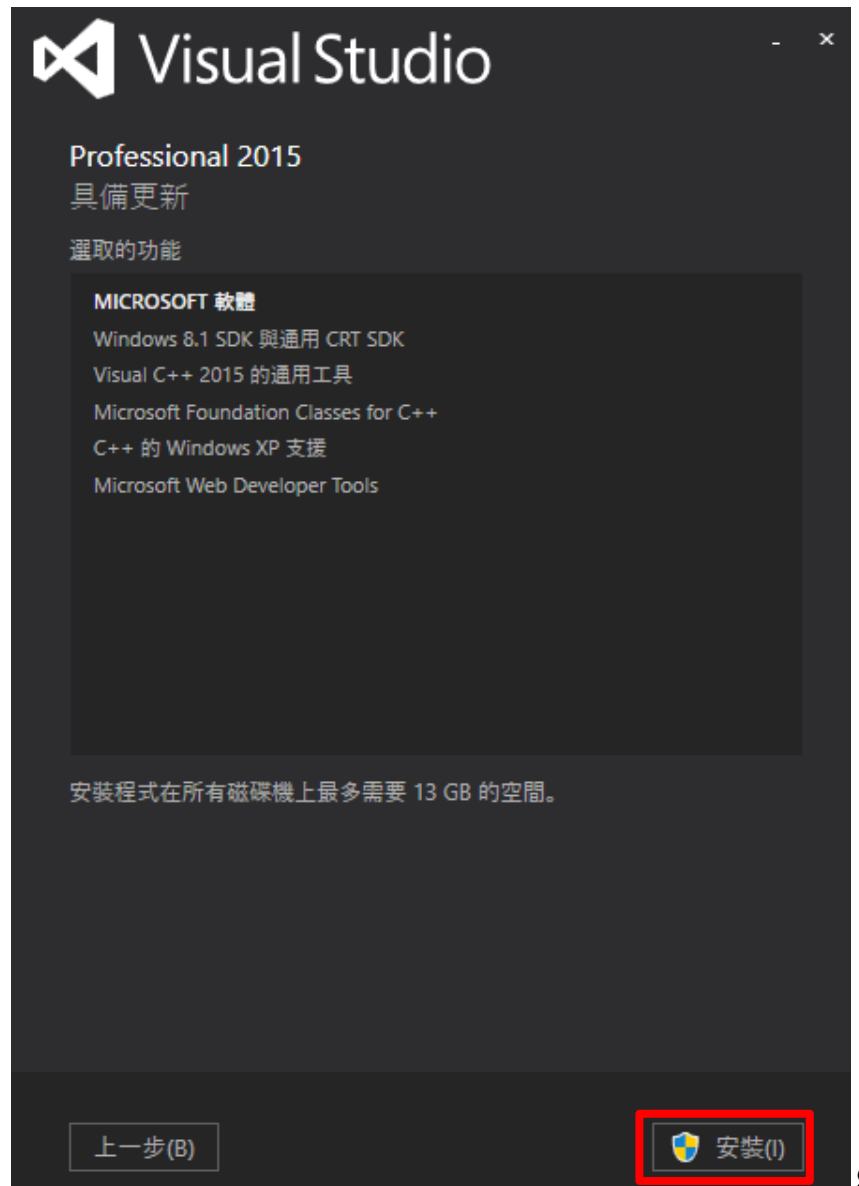
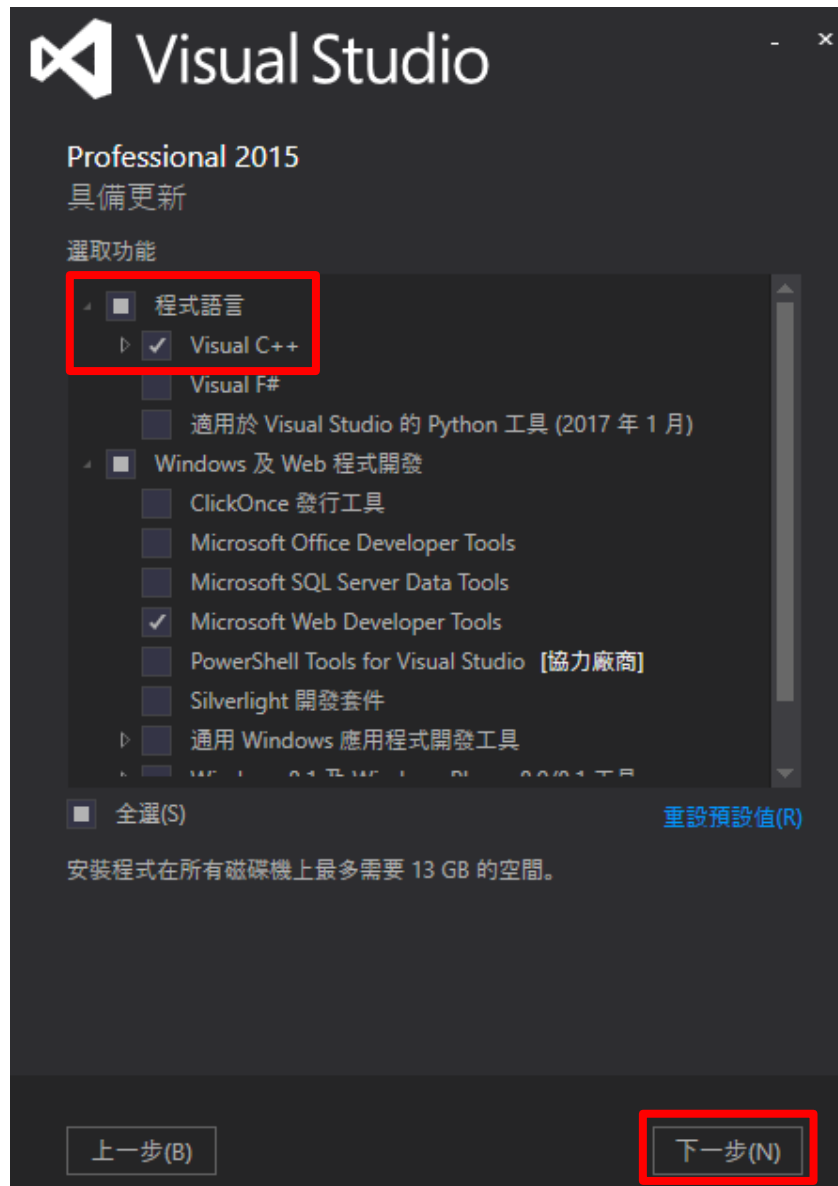
# 下載安裝 VS2015

- 等待安裝→選擇安裝類型為自訂→下一步



# 下載安裝VS2015

- 選取程式語言將Visual C++勾起→下一步→安裝



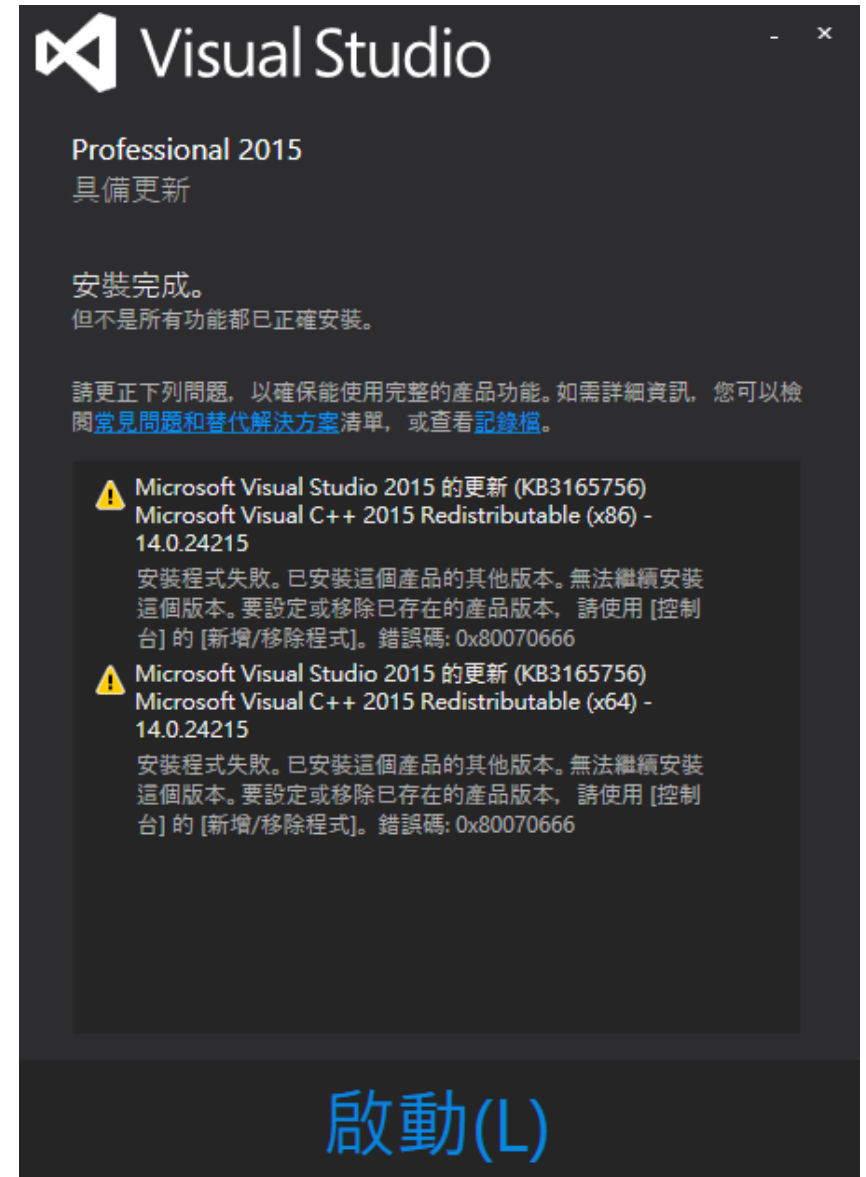


# 下載安裝VS2015

- 安裝完成後啟動
- ✓ 警告為可能已安裝Microsoft Visual Studio C++ 2015-2019 Redistributable

Microsoft Visual C++ 2008 Redistributable - x64 9.0.30729.6161  
Microsoft Visual C++ 2008 Redistributable - x86 9.0.30729.6161  
Microsoft Visual C++ 2010 x64 Redistributable - 10.0.40219  
Microsoft Visual C++ 2010 x86 Redistributable - 10.0.40219  
Microsoft Visual C++ 2012 Redistributable (x64) - 11.0.60610  
Microsoft Visual C++ 2012 Redistributable (x86) - 11.0.60610  
Microsoft Visual C++ 2013 Redistributable (x64) - 12.0.21005  
Microsoft Visual C++ 2013 Redistributable (x86) - 12.0.21005  
Microsoft Visual C++ 2015-2019 Redistributable (x64) - 14.23.27820  
Microsoft Visual C++ 2015-2019 Redistributable (x86) - 14.22.27821  
Microsoft Visual Studio 2010 Tools for Office Runtime (x64)  
Microsoft Visual Studio 2010 Tools for Office Runtime (x64) 語言套件 - 繁體中文  
Microsoft Visual Studio Professional 2015 with Updates

Microsoft Corporation  
Microsoft Corporation  
Microsoft Corporation  
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Microsoft Corporation  
Microsoft Corporation  
Microsoft Corporation



啟動(L)

# 開啟 VS2015

- 點選不是現在，以後再說
- 選擇喜好的色彩佈景主題
- 啟動 Visual Studio



歡迎!

連接至您所有的開發人員服務。

登入即可開始使用您的 Azure 點數、將程式碼發行至私人 Git 儲存機制、同步您的設定，以及解除鎖定 IDE。

[進一步了解](#)

登入()

沒有帳戶嗎? [註冊](#)

[不是現在，以後再說。](#)

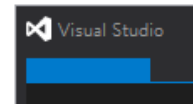


從熟悉的環境開始

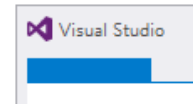
開發設定(V): [一般](#)

選擇您的色彩佈景主題

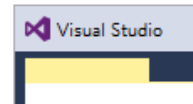
☐ 深色



☐ 淺色



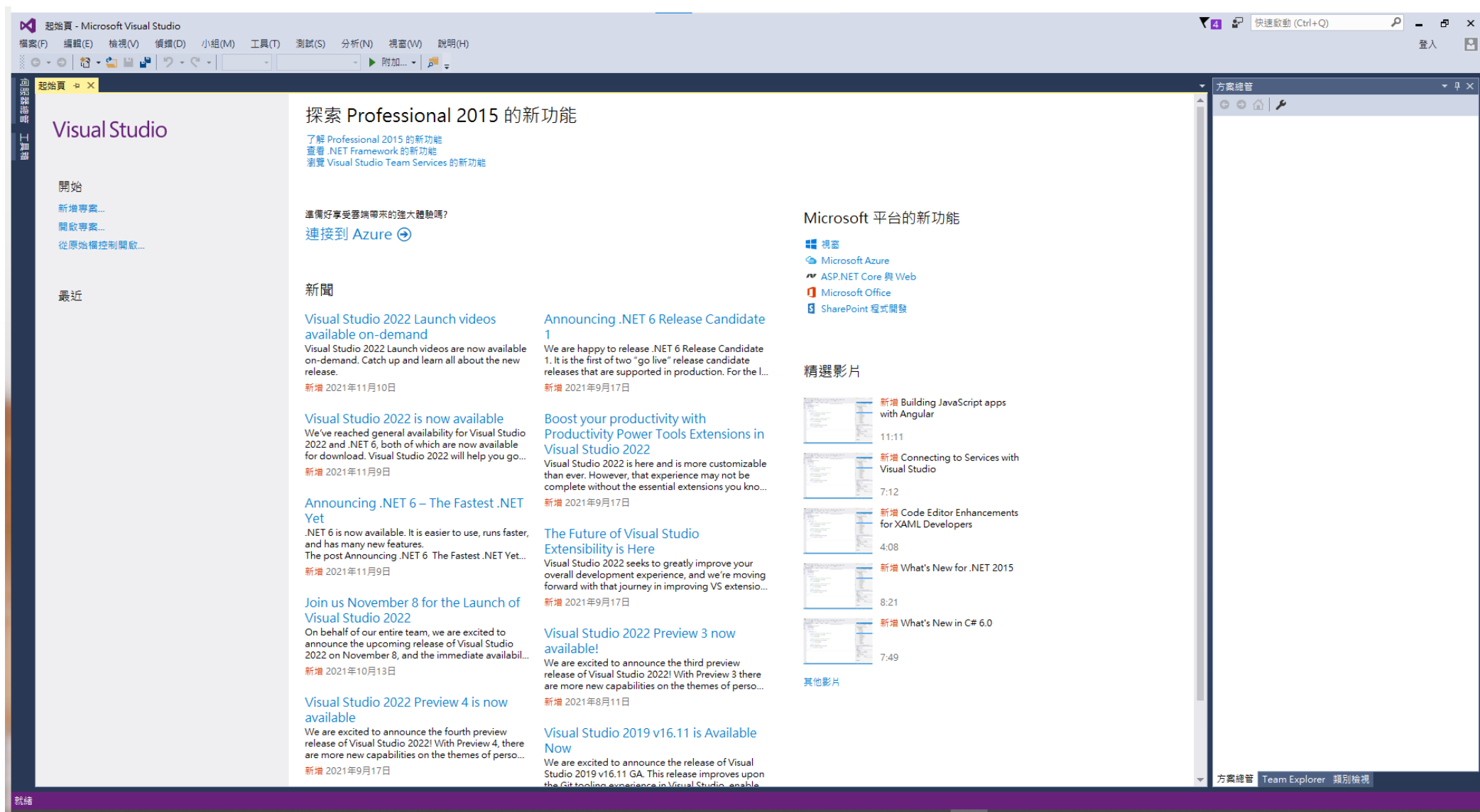
☒ 藍色



之後隨時可以變更這些設定。

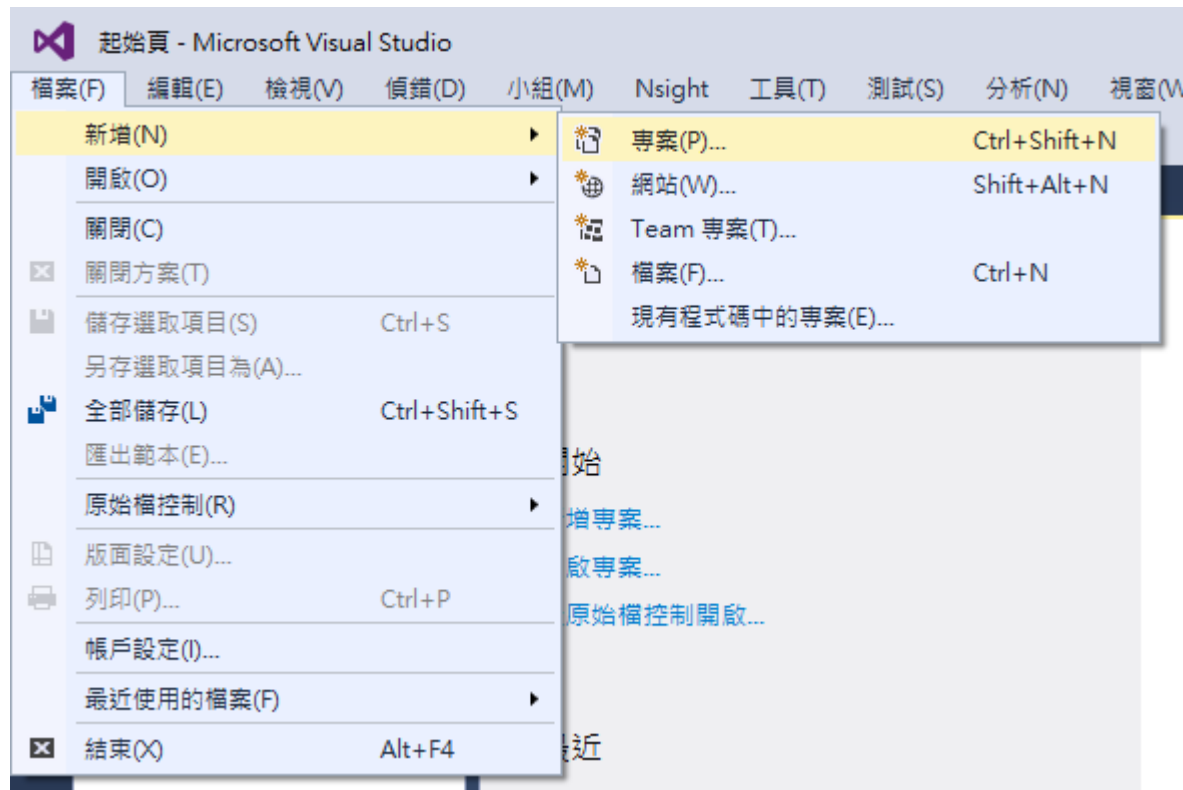
啟動 Visual Studio(S)

# VS2015創建專案與cpp檔案



# VS2015創建專案與cpp檔案

- 點選檔案→新增→專案



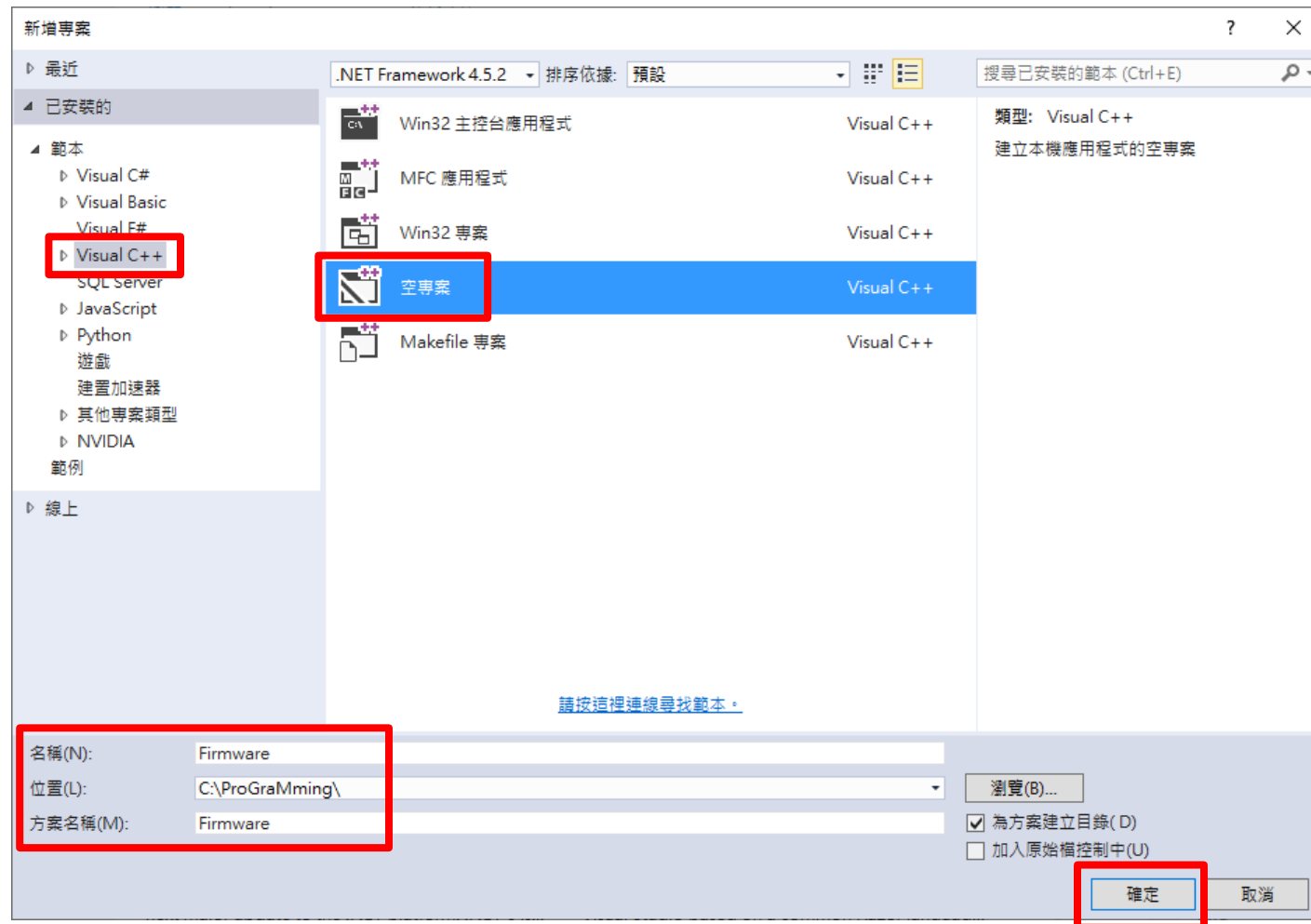
# VS2015創建專案與cpp檔案

- 選擇 Visual C++

→ 選擇空專案

→ 更改專案名稱

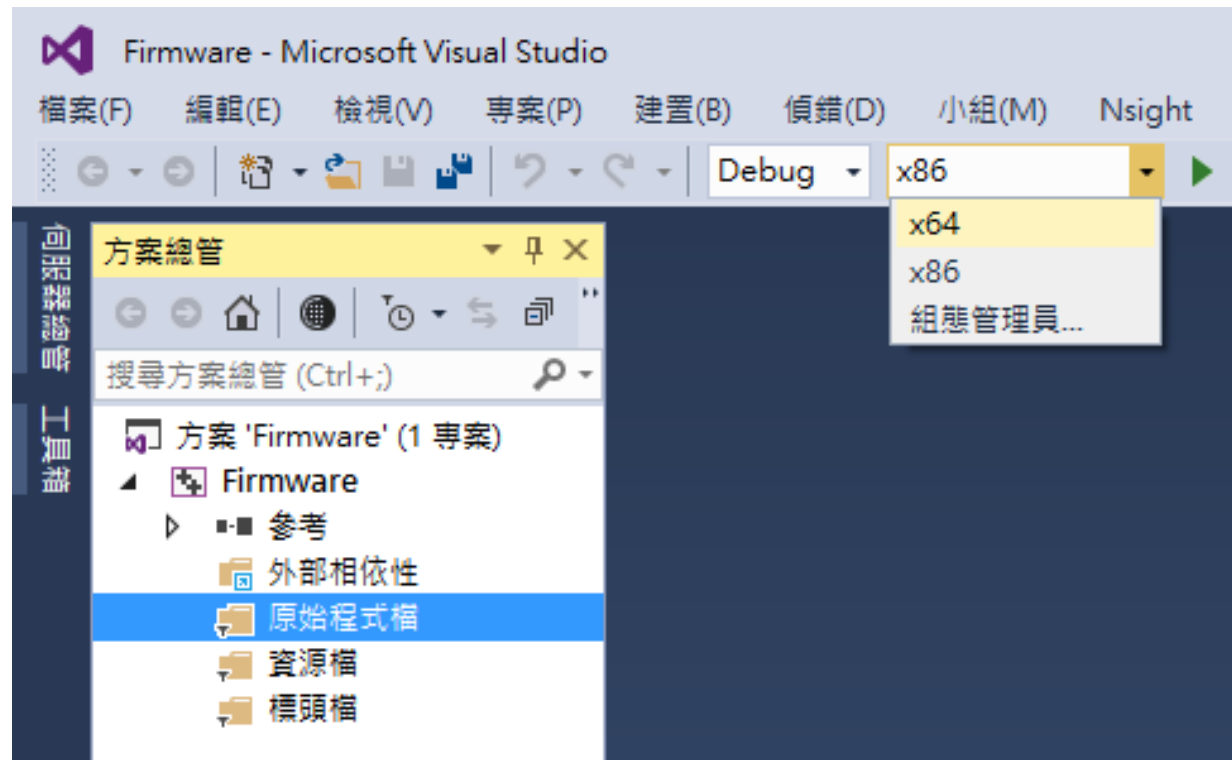
→ 瀏覽專案位置(方便找放桌面)





# VS2015創建專案與cpp檔案

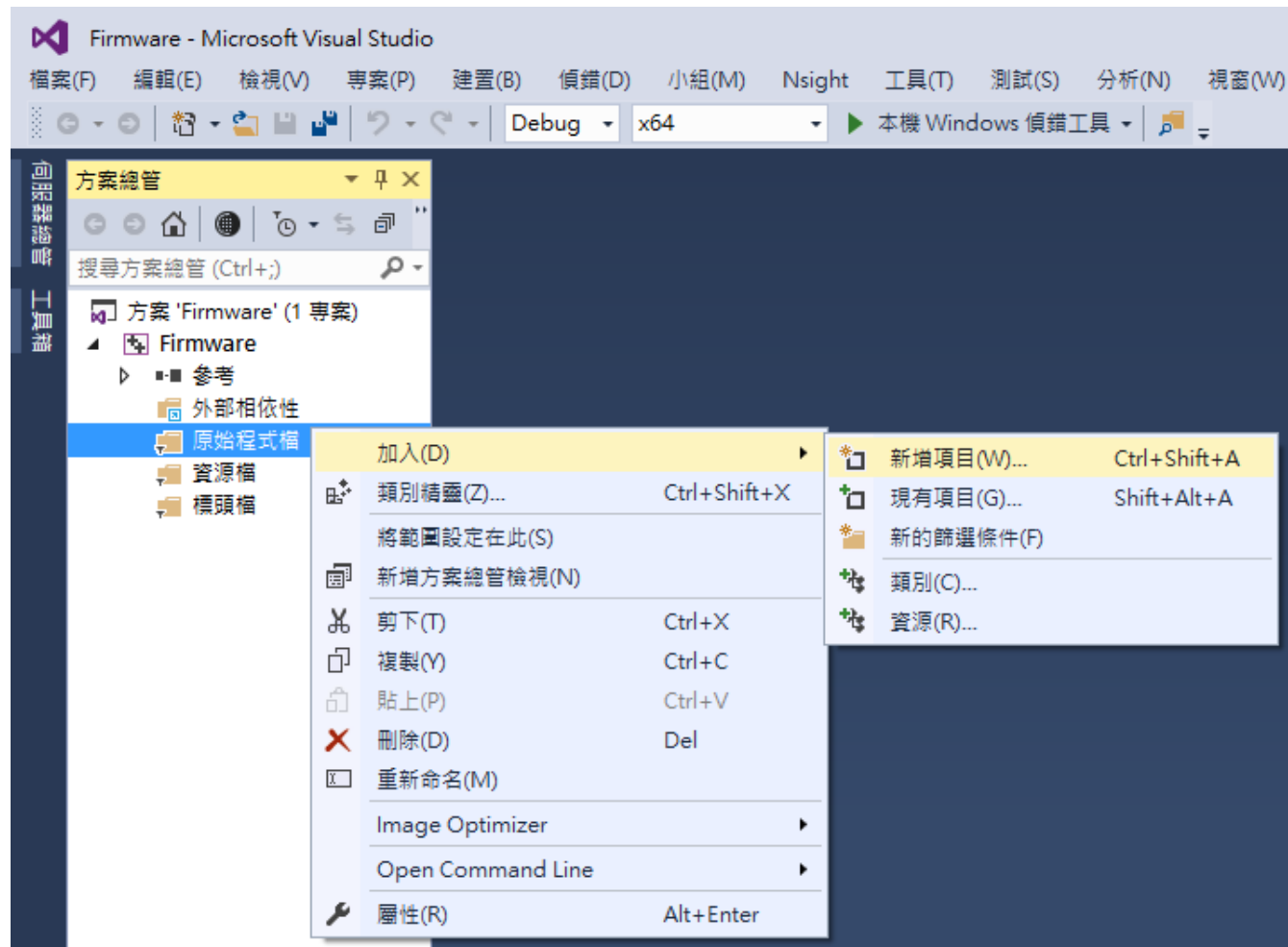
- 更改為x64組態



# VS2015創建專案與cpp檔案

- 在原始程式檔點選右鍵

→加入→新增項目



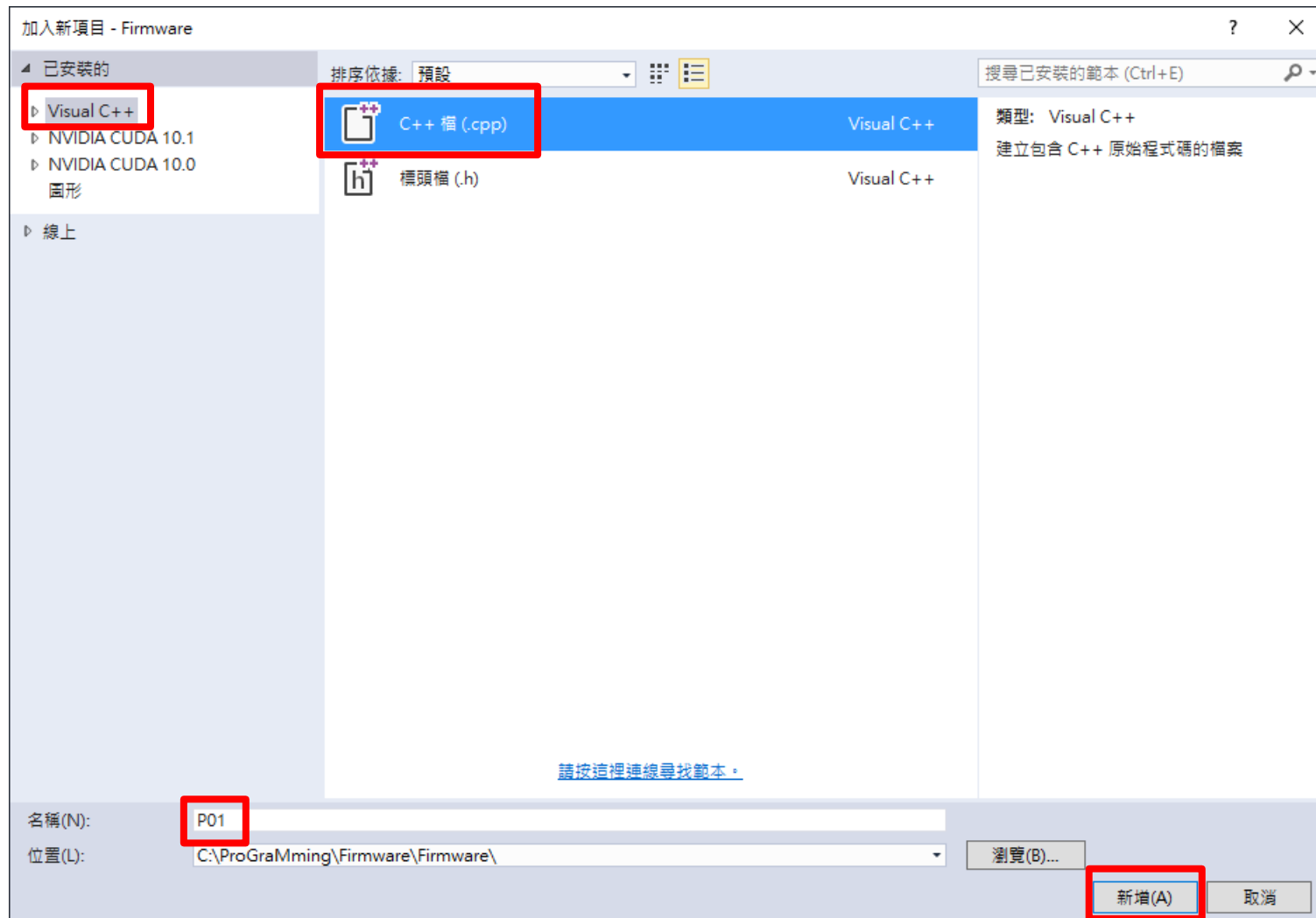
# VS2015創建專案與cpp檔案

- 選擇 Visual C++

→ C++檔(.cpp)

→ 更改名稱

→ 新增



# VS2015 crt secure no warnings

- 如何執行程式：
  - ✓ 直接複製貼上老師給的程式



# VS2015 crt secure no warnings

- ✓ 刪除複製過來的程式行數
- ✓ 注意縮排對齊
- ✓ 程式最初行加入以下程式，此為VS2015檔案讀取與輸出的bug

```
#define _CRT_SECURE_NO_WARNINGS
```



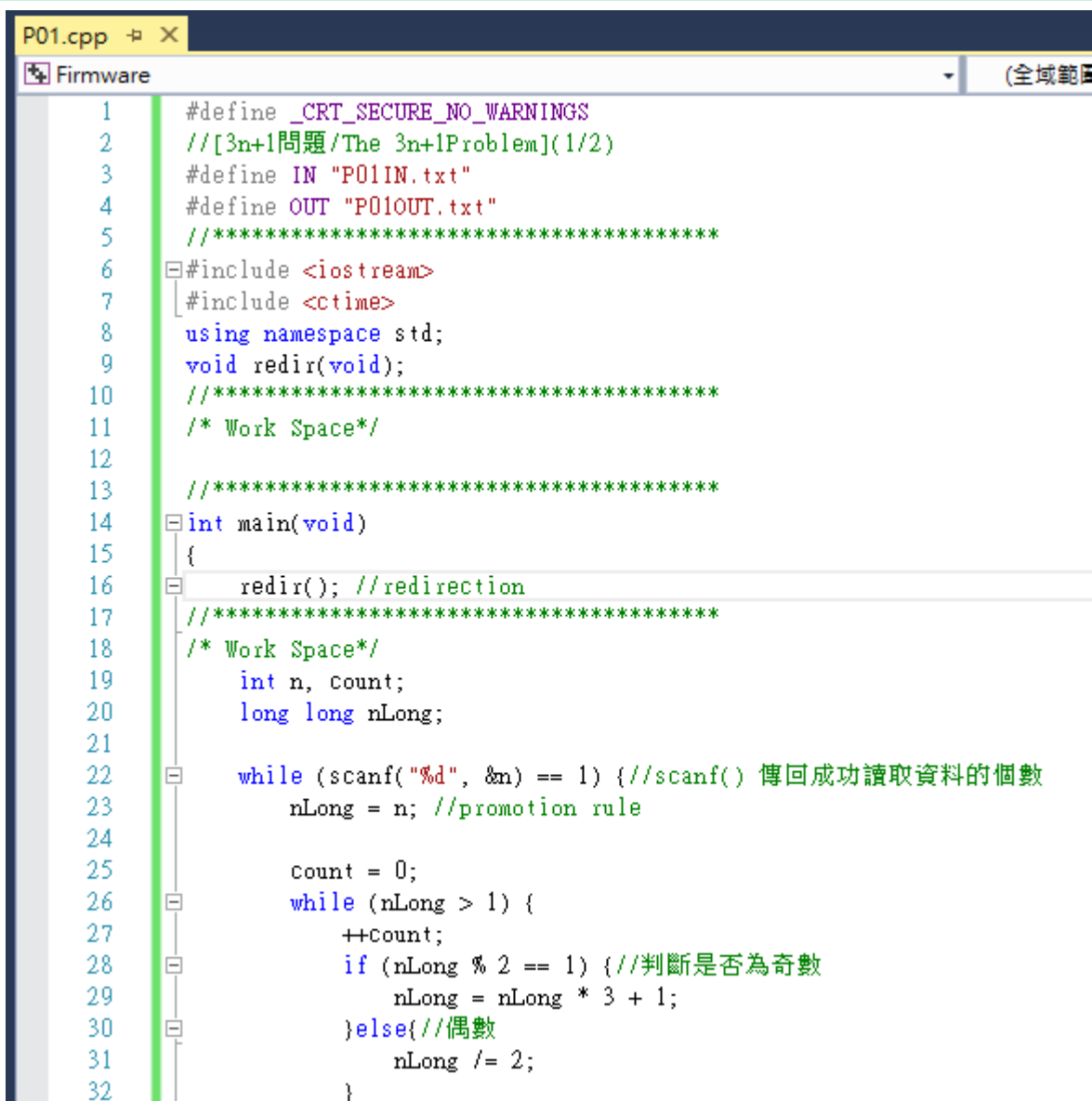


# VS2015 crt secure no warnings

- 在第一行加入

```
#define _CRT_SECURE_NO_WARNINGS
```

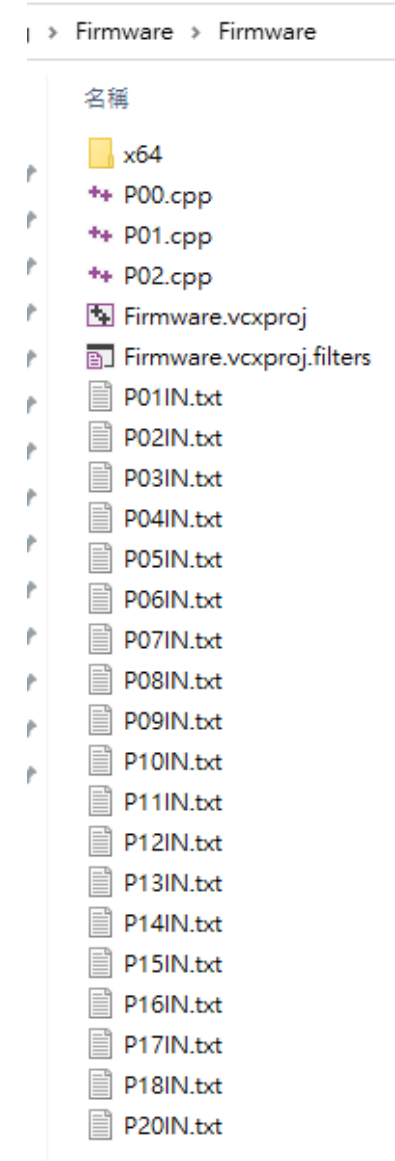
- 將剩餘程式碼打上



```
P01.cpp
Firmware
1  #define _CRT_SECURE_NO_WARNINGS
2  //[3n+1問題/The 3n+1Problem](1/2)
3  #define IN "P01IN.txt"
4  #define OUT "P01OUT.txt"
5  //*****
6  #include <iostream>
7  #include <ctime>
8  using namespace std;
9  void redir(void);
10 //*****
11 /* Work Space*/
12
13 //*****
14 int main(void)
15 {
16     redir(); //redirection
17     //*****
18     /* Work Space*/
19     int n, count;
20     long long nLong;
21
22     while (scanf("%d", &n) == 1) { //scanf() 傳回成功讀取資料的個數
23         nLong = n; //promotion rule
24
25         count = 0;
26         while (nLong > 1) {
27             ++count;
28             if (nLong % 2 == 1) { //判斷是否為奇數
29                 nLong = nLong * 3 + 1;
30             } else { //偶數
31                 nLong /= 2;
32             }
33         }
34     }
35 }
```

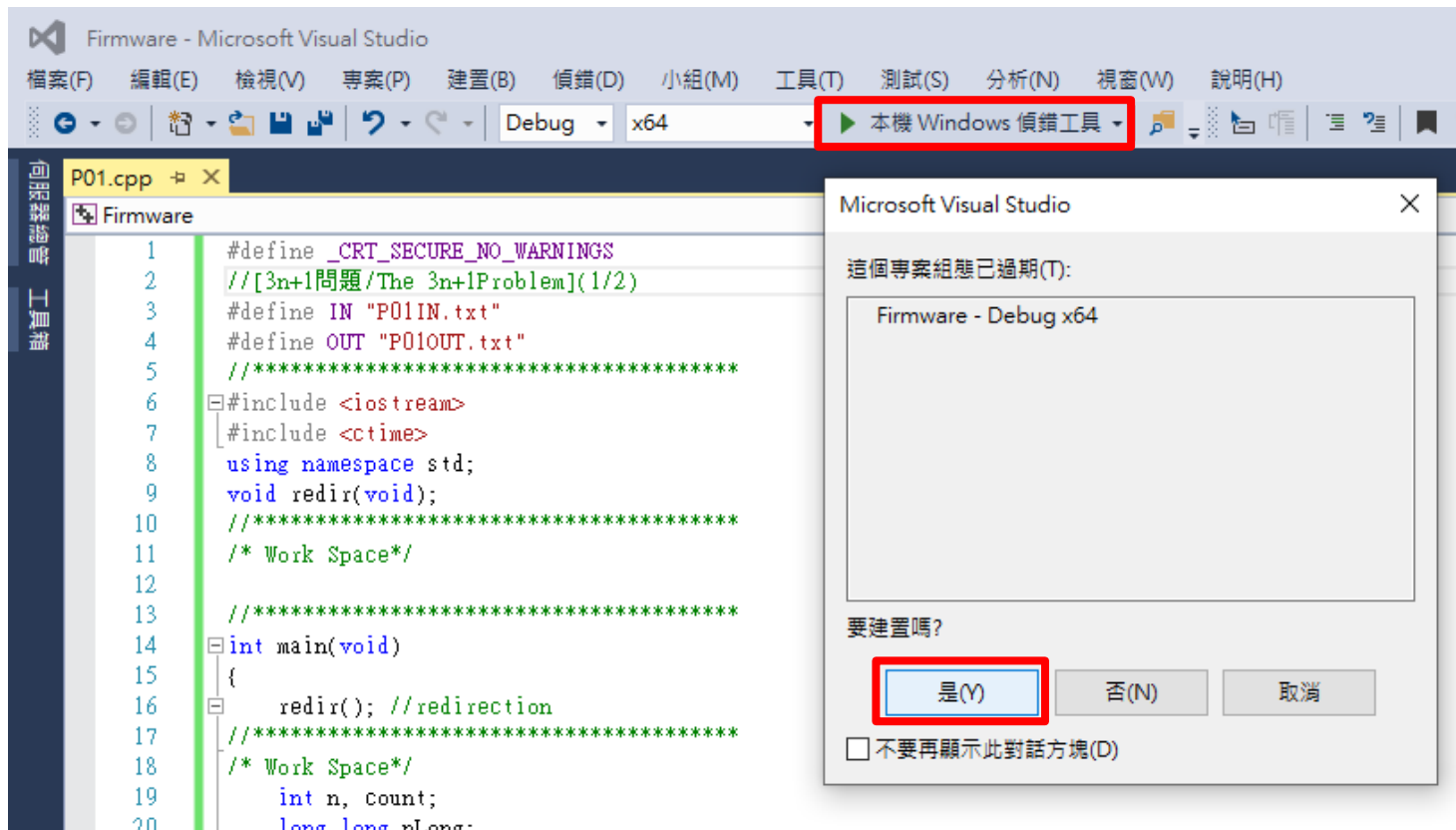
# 放置txt檔案位置

- 專案名稱：Firmware
- 放置位置：xxx路徑(桌面)/Firmware/Firmware/
- ✓ 簡易認知：放置與cpp檔案同一個資料夾路徑下，裡面有x64資料夾、Firmware.vcxproj、Firmware.vcxproj.filters



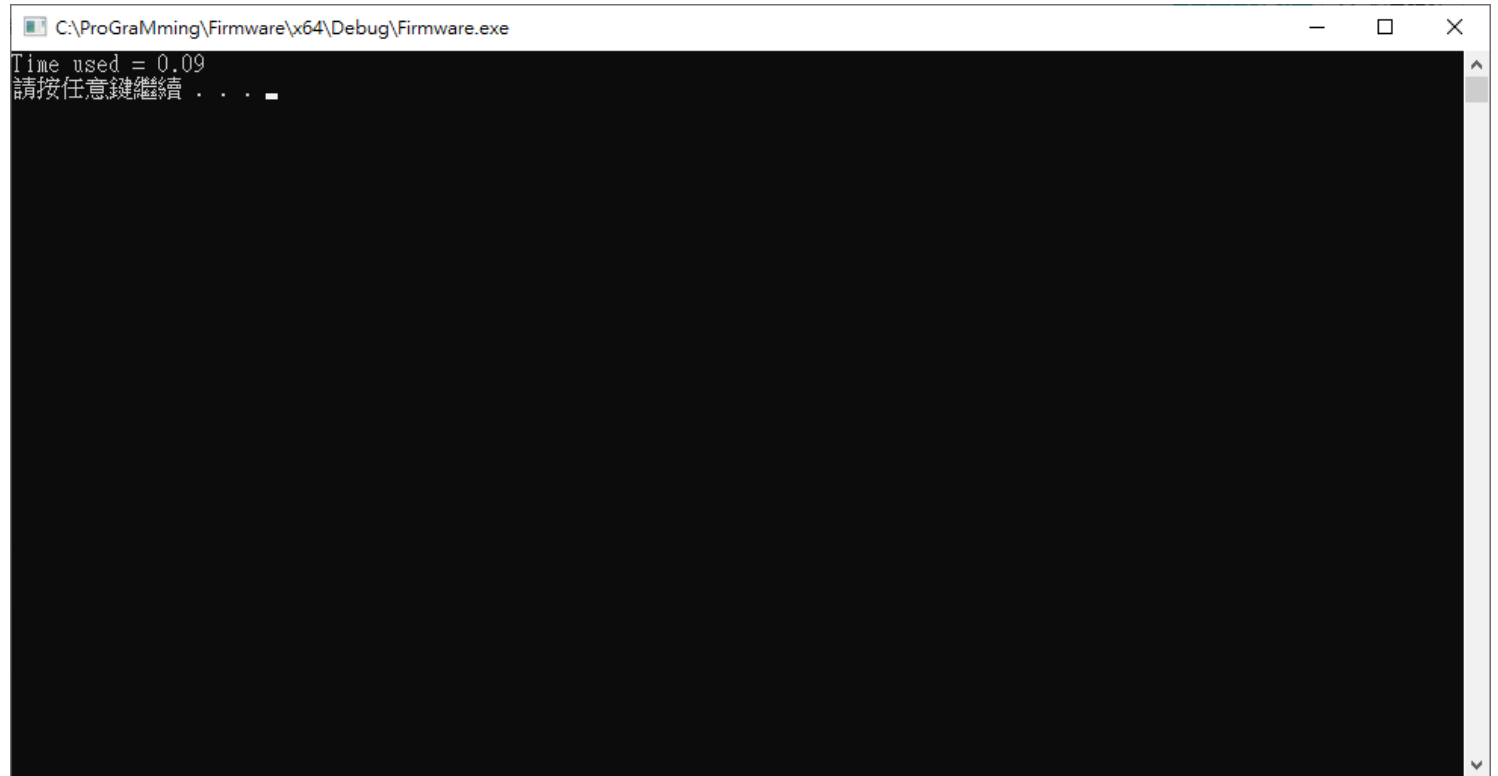
# 執行

- 點選執行或F5
- 是



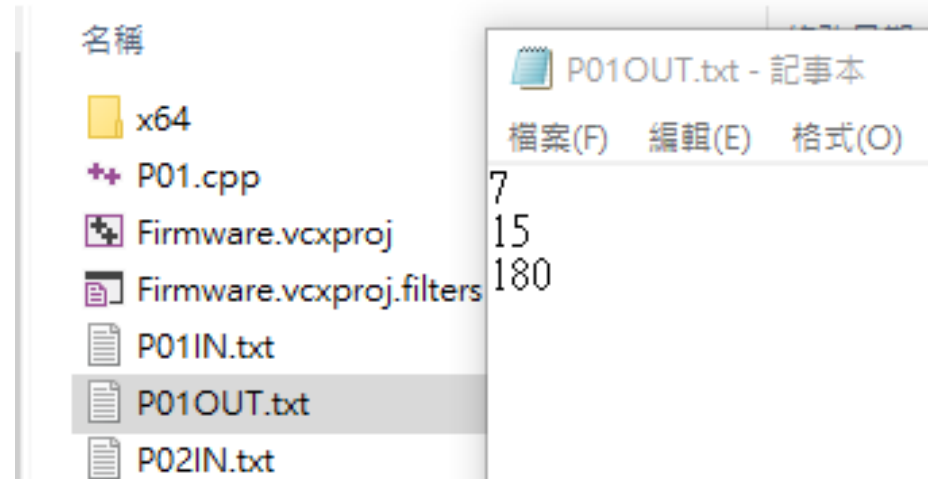
# 執行

- 按任意鍵關閉



# 執行

- 執行成功生成P01OUT.txt







# Q&A

