

## Install Anaconda or Miniconda

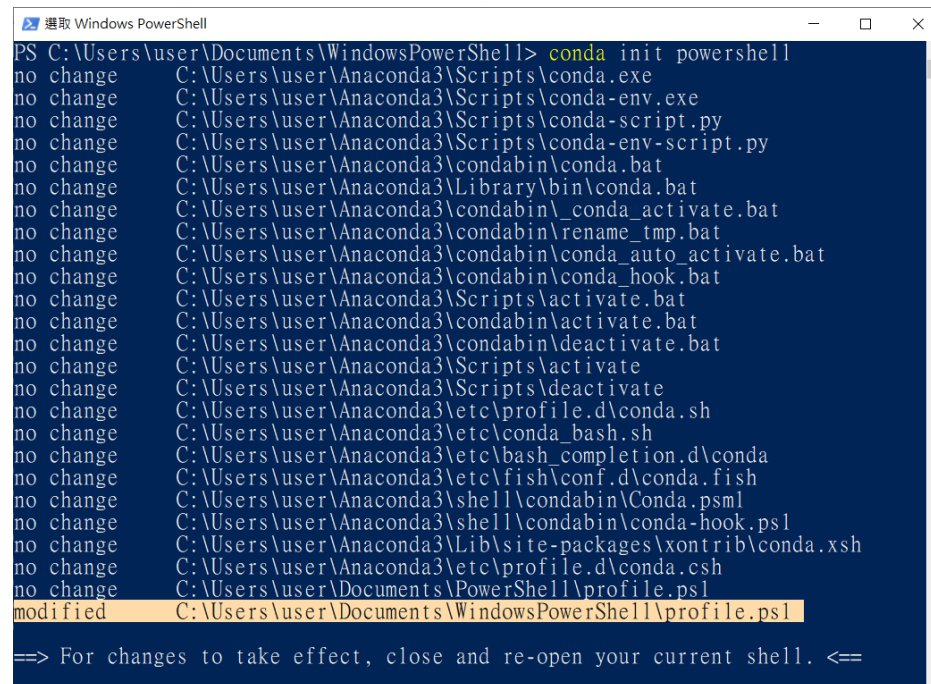
先要把 Anaconda 或 Miniconda 安裝好。

## Set PowerShell to work properly

PowerShell 是微軟新一代的命令列工具，把它設定好，Vscode 會用到它。

### Enable to use conda command in Powershell

\$>conda init powershell



```

PS C:\Users\user\Documents\WindowsPowerShell> conda init powershell
no change C:\Users\user\Anaconda3\Scripts\conda.exe
no change C:\Users\user\Anaconda3\Scripts\conda-env.exe
no change C:\Users\user\Anaconda3\Scripts\conda-script.py
no change C:\Users\user\Anaconda3\Scripts\conda-env-script.py
no change C:\Users\user\Anaconda3\condabin\conda.bat
no change C:\Users\user\Anaconda3\Library\bin\conda.bat
no change C:\Users\user\Anaconda3\condabin\conda_activate.bat
no change C:\Users\user\Anaconda3\condabin\rename_tmp.bat
no change C:\Users\user\Anaconda3\condabin\conda_auto_activate.bat
no change C:\Users\user\Anaconda3\condabin\conda_hook.bat
no change C:\Users\user\Anaconda3\Scripts\activate.bat
no change C:\Users\user\Anaconda3\condabin\activate.bat
no change C:\Users\user\Anaconda3\condabin\deactivate.bat
no change C:\Users\user\Anaconda3\Scripts\activate
no change C:\Users\user\Anaconda3\Scripts\deactivate
no change C:\Users\user\Anaconda3\etc\profile.d\conda.sh
no change C:\Users\user\Anaconda3\etc\conda_bash.sh
no change C:\Users\user\Anaconda3\etc\bash_completion.d\conda
no change C:\Users\user\Anaconda3\etc\fish\conf.d\conda.fish
no change C:\Users\user\Anaconda3\shell\condabin\Conda.psml
no change C:\Users\user\Anaconda3\shell\condabin\conda-hook.ps1
no change C:\Users\user\Anaconda3\Lib\site-packages\xontrib\conda.xsh
no change C:\Users\user\Anaconda3\etc\profile.d\conda.csh
no change C:\Users\user\Documents\PowerShell\profile.ps1
modified C:\Users\user\Documents\WindowsPowerShell\profile.ps1

==> For changes to take effect, close and re-open your current shell. <==
  
```

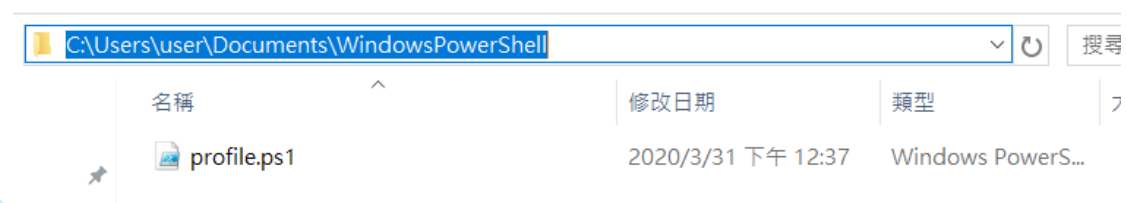
### Modify profile.ps1

The profile of Windows PowerShell is located in your Documents directory.

The profile name is “profile.ps1”

“C:/Users/user/Documents/WindowsPowerShell/profile.ps1” 這個檔案自動產生，位於你的文件夾中，我們要進一步修改它。

“user” is the user name in my PC.



Note:

If you install PowerShell 7, the profile of PowerShell 7 is located in your Documents directory:

`"C:/Users/user/Documents/PowerShell/profile.ps1"` 如果你安裝 PowerShell 7，設定檔自動產生於此，卷夾名稱有一些不一樣。

The following commands will be automatically inserted into the profile.

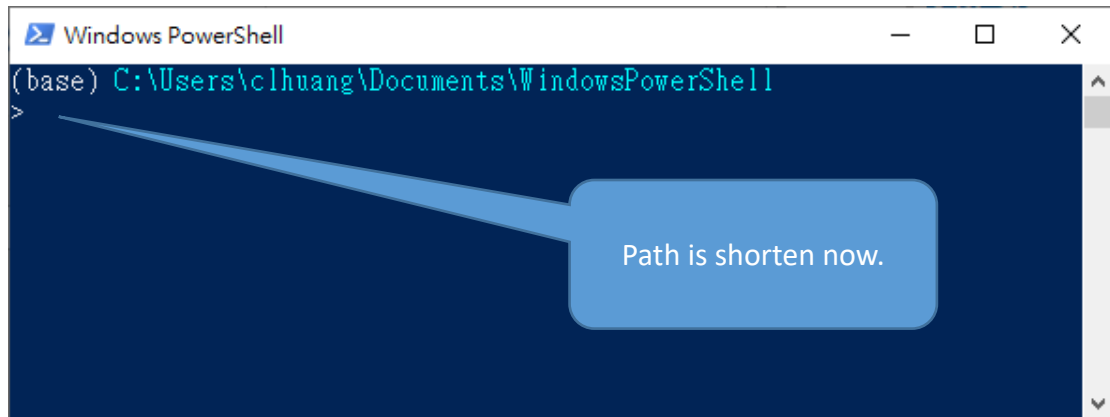
打開此設定檔，你會看到以下內容:

```
#region conda initialize
# !! Contents within this block are managed by 'conda init' !!
(& "C:\Users\user\Anaconda3\Scripts\conda.exe" "shell.powershell" "hook") | Out-String | Invoke-Expression
#endregion
```

## 2

## Shorten Path in PowerShell 縮短顯示路徑





### Modify profile.ps1

The profile of Windows PowerShell is in your documents directory. The full path is as follows:

"C:/Users/user\_name/Documents/WindowsPowerShell/profile.ps1"

If the file doesn't exist, then create it. Then place the following function in front of the profile script.

新增這一段命令文字

```
function prompt {
    Write-Host $ExecutionContext.SessionState.Path.CurrentLocation -
ForegroundColor Cyan
    "$('>' * ($nestedPromptLevel + 1)) "
}
```

### Your profile.ps1 will look like:

Now in the profile you will have the following scripts:

完整的內容如下:

```
function prompt {
    Write-Host $ExecutionContext.SessionState.Path.CurrentLocation -
ForegroundColor Cyan
    "$('>' * ($nestedPromptLevel + 1)) "
}
```

這一段文字要寫在最前面才可以!

你的路徑會不一樣!

```
#region conda initialize
# !! Contents within this block are managed by 'conda init' !!
(& "C:\Users\user\Anaconda3\Scripts\conda.exe" "shell.powershell" "hook") | Out-
```

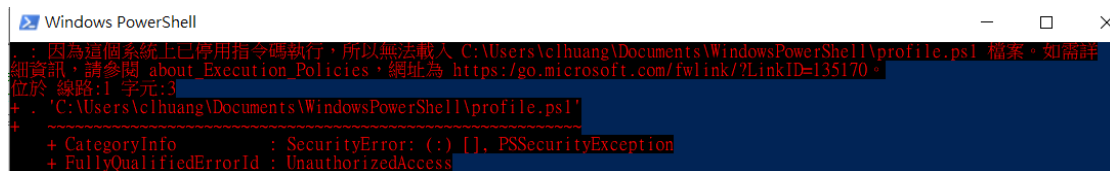
String | Invoke-Expression  
#endregion

Notice: the "function prompt" script should be placed before the "region conda initialize."

function prompt 必須要放在 conda initialize 之前，否則視窗畫面無法顯示虛擬環境的名稱，雖可運作，但有小瑕疵。

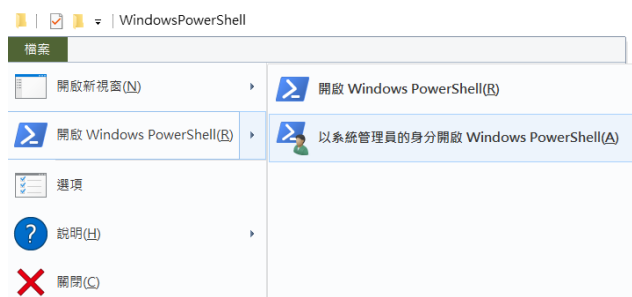
## Set execution policy to "RemoteSigned"

Do you get the following message when opening PowerShell?



Update the PowerShell execution policy on the system to allow the script to run. In the PowerShell window, enter set-executionpolicy RemoteSigned. The system will prompt to confirm the change. Enter the letter Y or press the enter key to change the execution policy setting.

\$>Set-ExecutionPolicy RemoteSigned



\$>Set-ExecutionPolicy  
RemoteSigned  
必須要在系統管理  
員身分下執行

```

選取 系統管理員: Windows PowerShell
需詳細資訊，請參閱 about_Execution_Policies，網址為 https://go.microsoft.com/fwlink/?LinkID=135170。
位於 線路:1 字元:3
+ . 'C:\Users\clhuang\Documents\WindowsPowerShell\profile.ps1'
+ ~~~~~
+ CategoryInfo          : SecurityError: (:) [], PSSecurityException
+ FullyQualifiedErrorId : UnauthorizedAccess
PS C:\Users\clhuang\Documents\WindowsPowerShell> Set-ExecutionPolicy RemoteSigned
執行原則變更
執行原則有助於防範您不信任的指令碼。如果變更執行原則，可能會使您接觸到 about_Execution_Policies 說明主題（網址為
https://go.microsoft.com/fwlink/?LinkID=135170）中所述的安全性風險。您要變更執行原則嗎？
[Y] 是(Y) [A] 全部皆是(A) [N] 否(N) [L] 全部皆否(L) [S] 暫停(S) [?] 說明（預設值為 "N"）: y
PS C:\Users\clhuang\Documents\WindowsPowerShell>

```

**\*\*「執行原則」\*\***有下列 4 種：

**Restricted**：關閉腳本檔的執行功能，這是預設的設定值。

**AllSigned**：只允許執行受信任發行者簽署過的腳本檔。

**RemoteSigned**：在本機電腦所撰寫的腳本檔，不需要簽署就可執行；但是從網際網路（例如：email、MSN Messenger）下載的腳本檔就必須經過受信任發行者的簽署才能執行。

**Unrestricted**：任何腳本檔皆可被執行，但是於執行網際網路下載的腳本檔時，會先出現警告的提示視窗。

我們可以先利用 `Get-ExecutionPolicy` 來確認系統目前的指令檔執行限制為何：

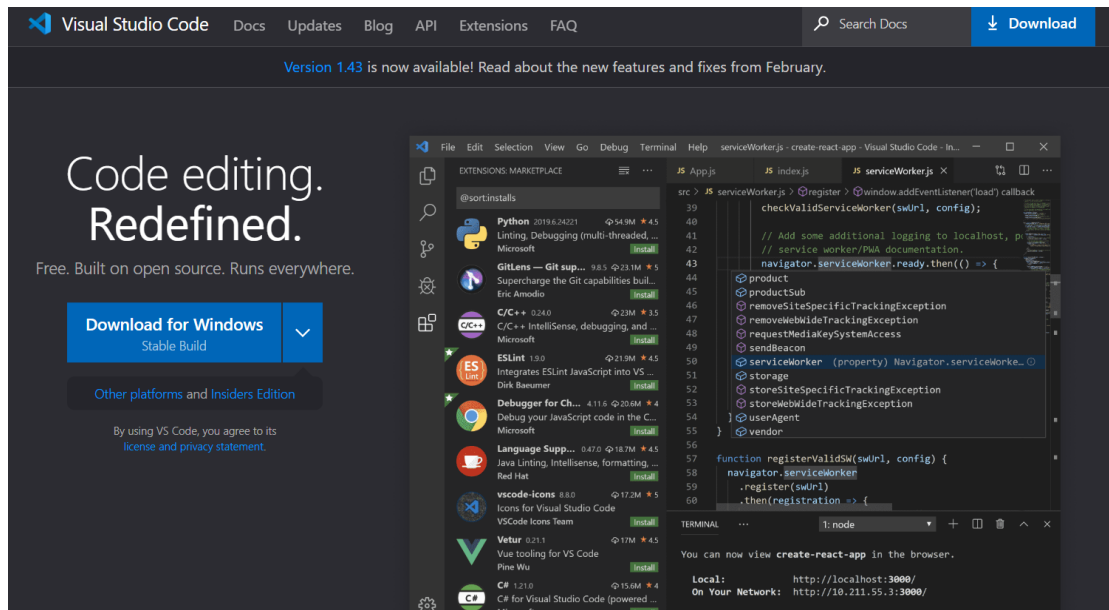
`Get-ExecutionPolicy`

Check up the PowerShell execution policy on the system:

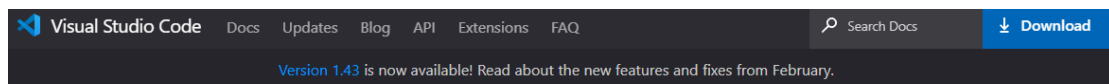
`$>Get-ExecutionPolicy`

## VS Code Installation

VS Code is one of the best Editor in the world.



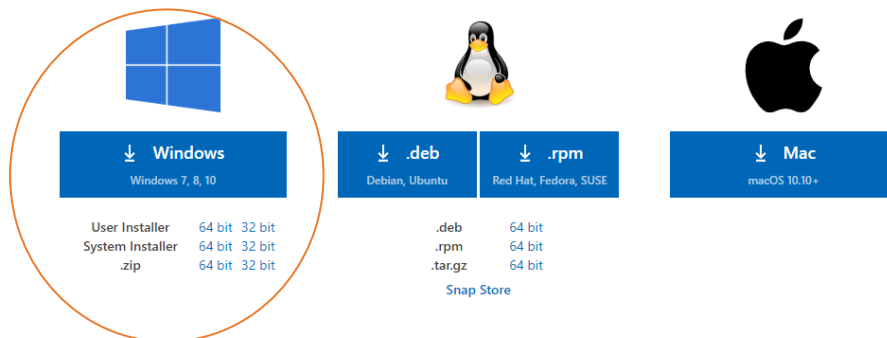
到官網下載軟體 <https://code.visualstudio.com/>



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## Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.



有兩個版本可以選擇，其安裝路徑與步驟稍有不同，功能完全相同。

You can download the “System installer” or “User installer.” Their installation folders are not the same.

### User versus system setup

VS Code provides both Windows user and system level setups. Installing the user setup does not require Administrator privileges as the location will be under your user Local AppData (LOCALAPPDATA) folder. User setup also provides a smoother

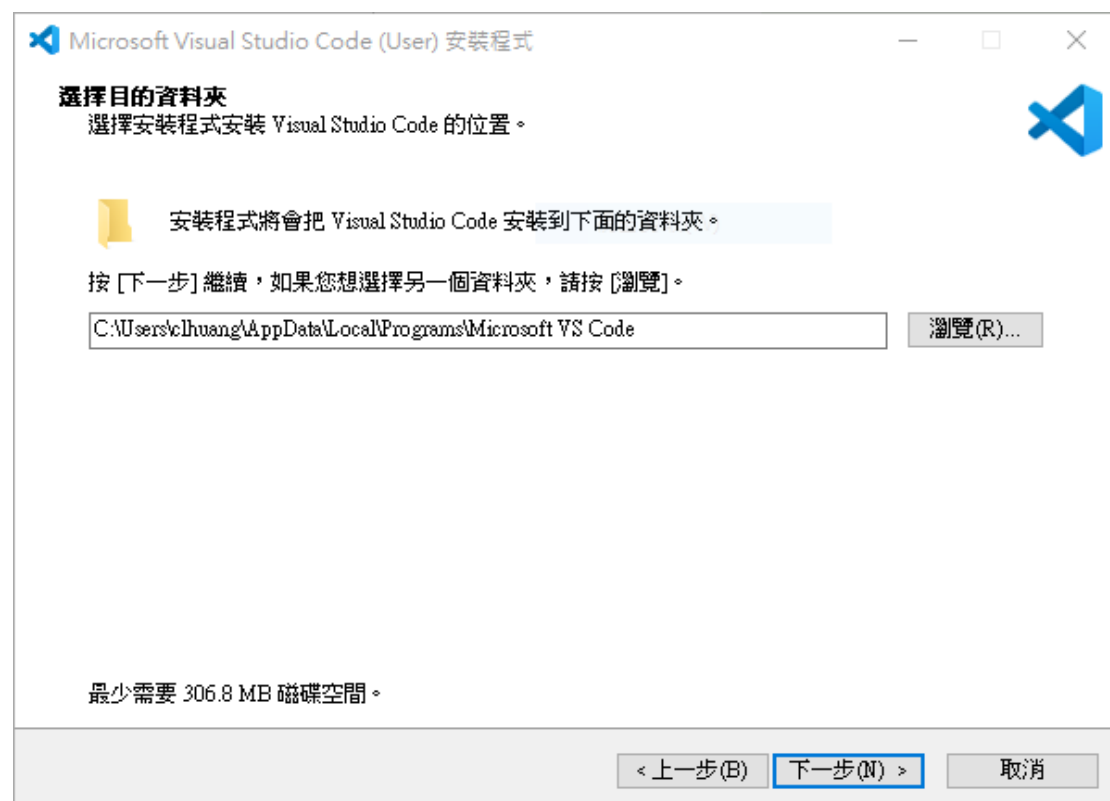
background update experience.

The system setup requires elevation to Administrator privileges and will place the installation under Program Files.

兩個版本安裝路徑不同。

我們使用“User installer”比較方便！

會詢問你安裝路徑，預設即可！

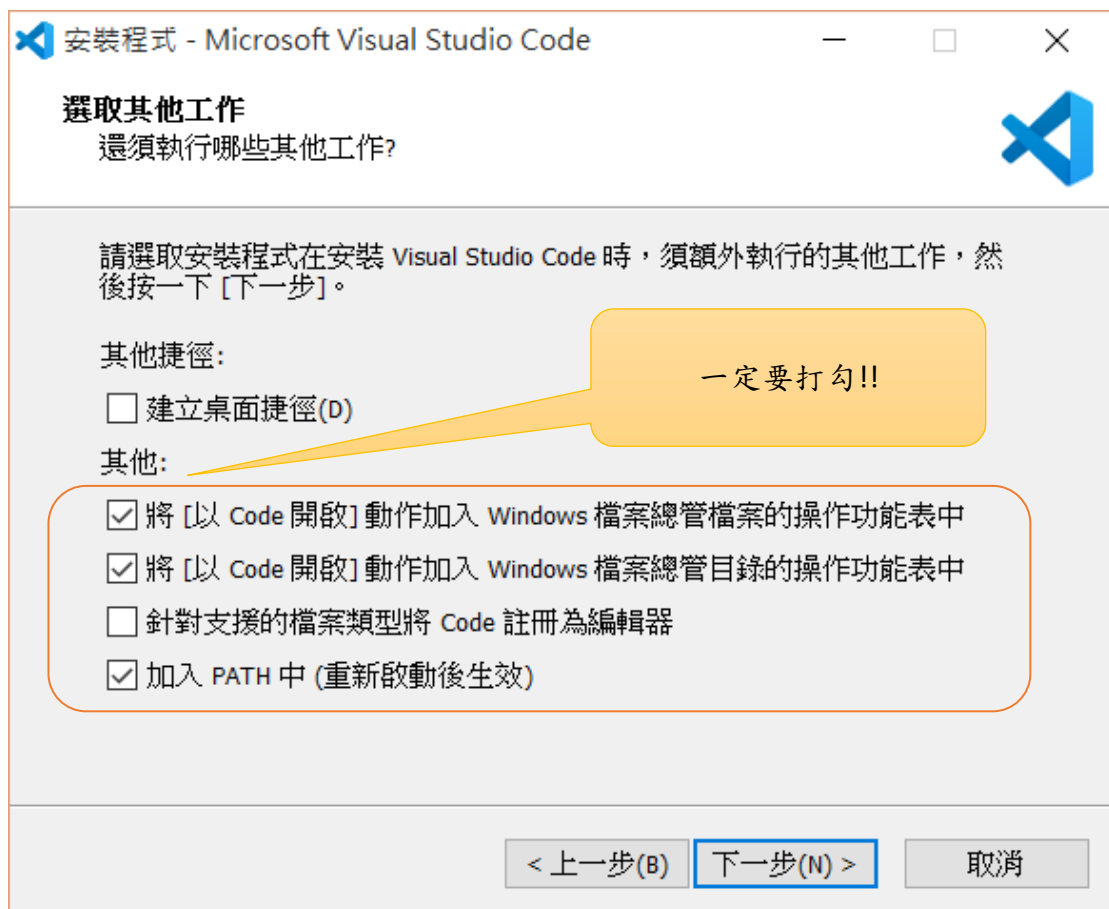
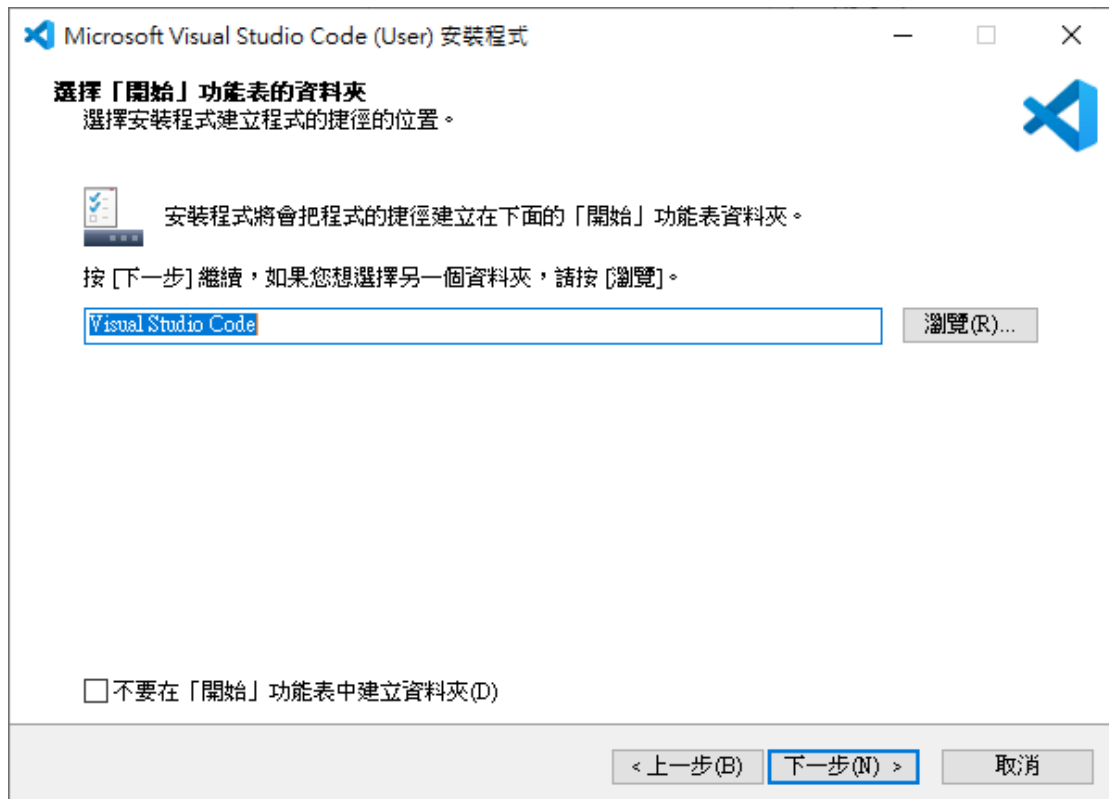


安裝路徑如下：

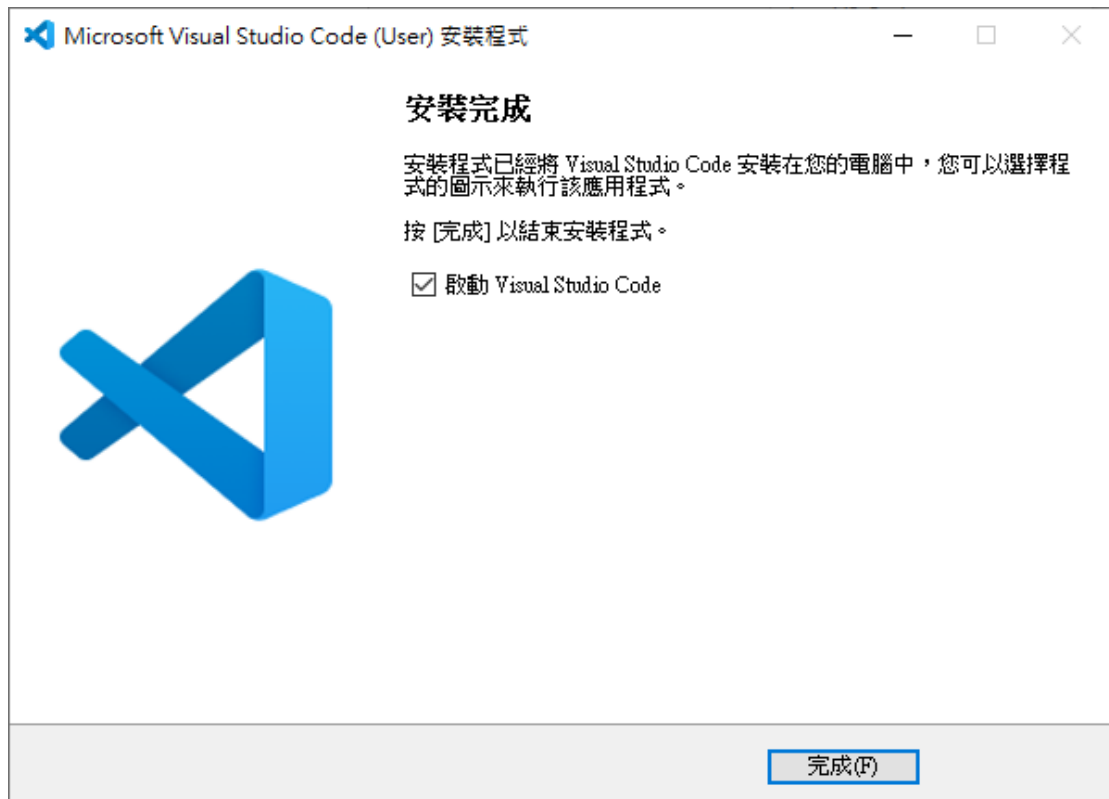
By default, VS Code is installed under

C:\users\{username}\AppData\Local\Programs\Microsoft VS Code.

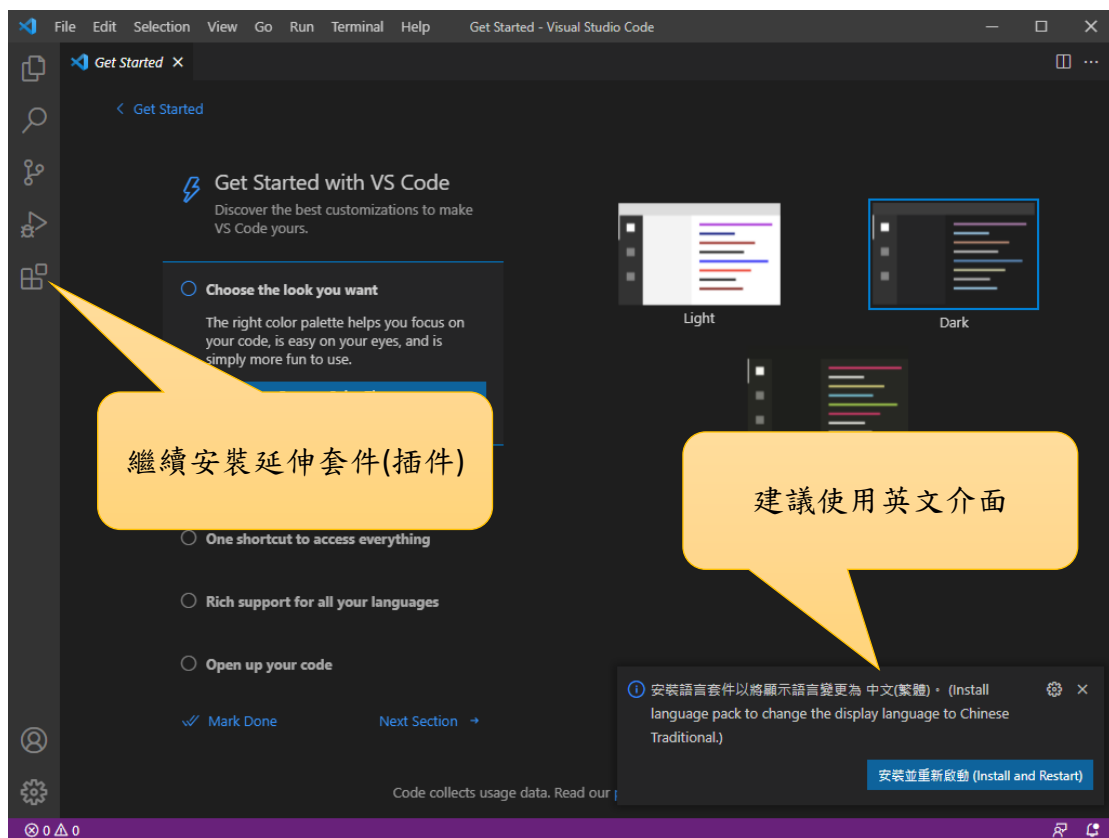
使用“System installer”，其安裝路徑在 Program Files 底下，其餘步驟都相同







9 安裝完畢，進入 vscode 看到的畫面：



## The extensions you have to install 繼續安裝延伸套件 (Plugin)

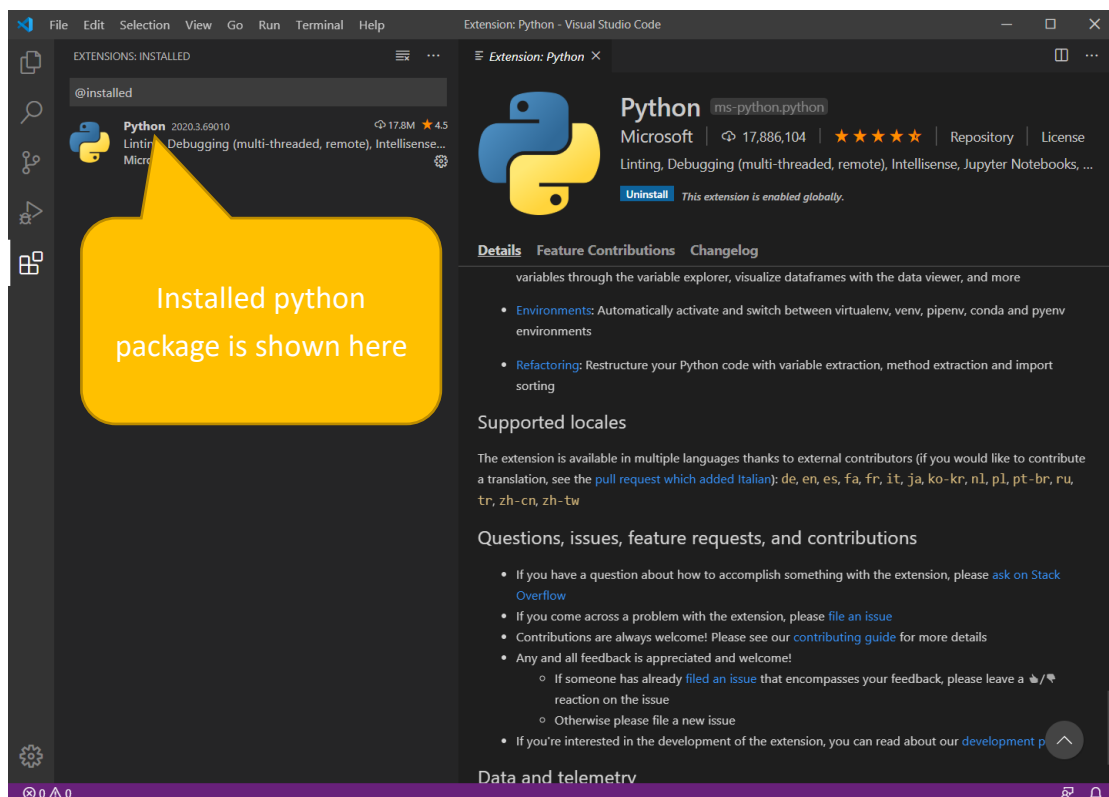
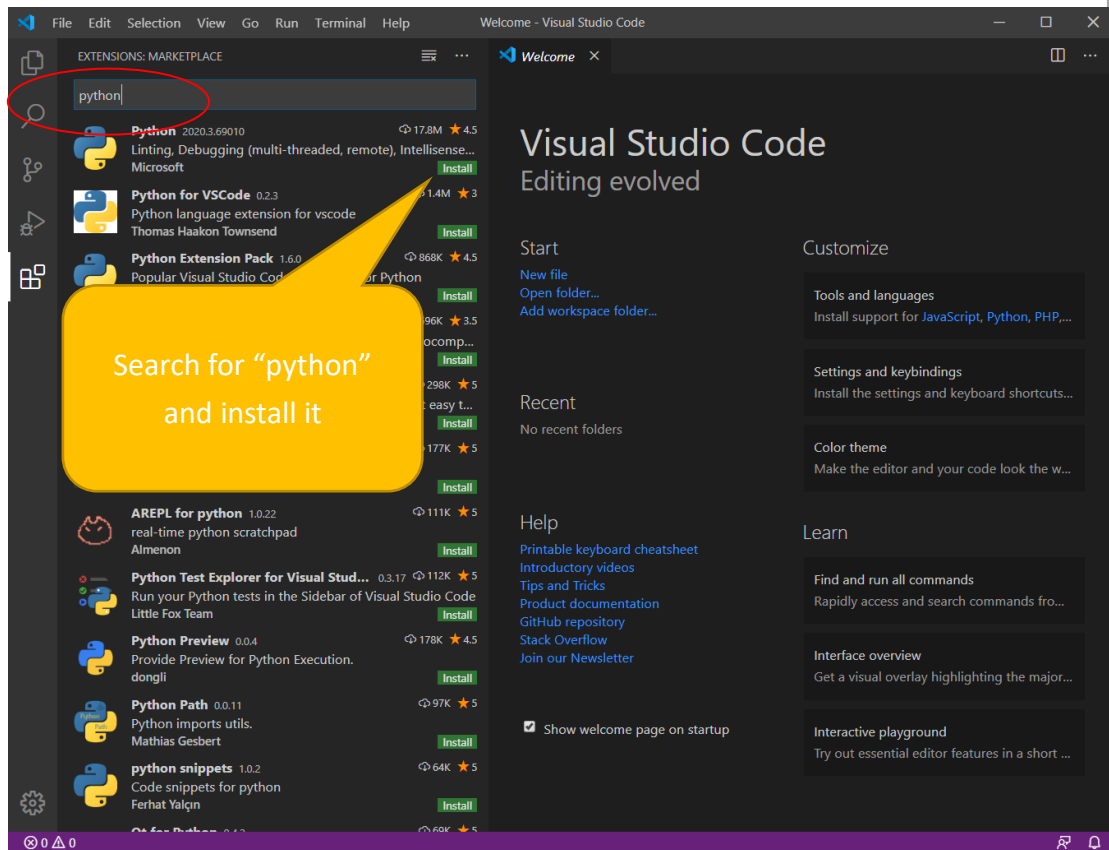
1. Python—by Microsoft (three extensions will be installed)
  - Pylance: A performant, feature-rich language server for Python in VS Code
  - Jupyter
2. Live Server (local server for dynamic pages)
3. Django by "Baptiste Darthenay"
4. Prettier - Code formatter (or Beautify)  
Beautify javascript, JSON, CSS, Sass, and HTML in Visual Studio Code.

Shift + Alt + F    Auto formatting 自動格式化

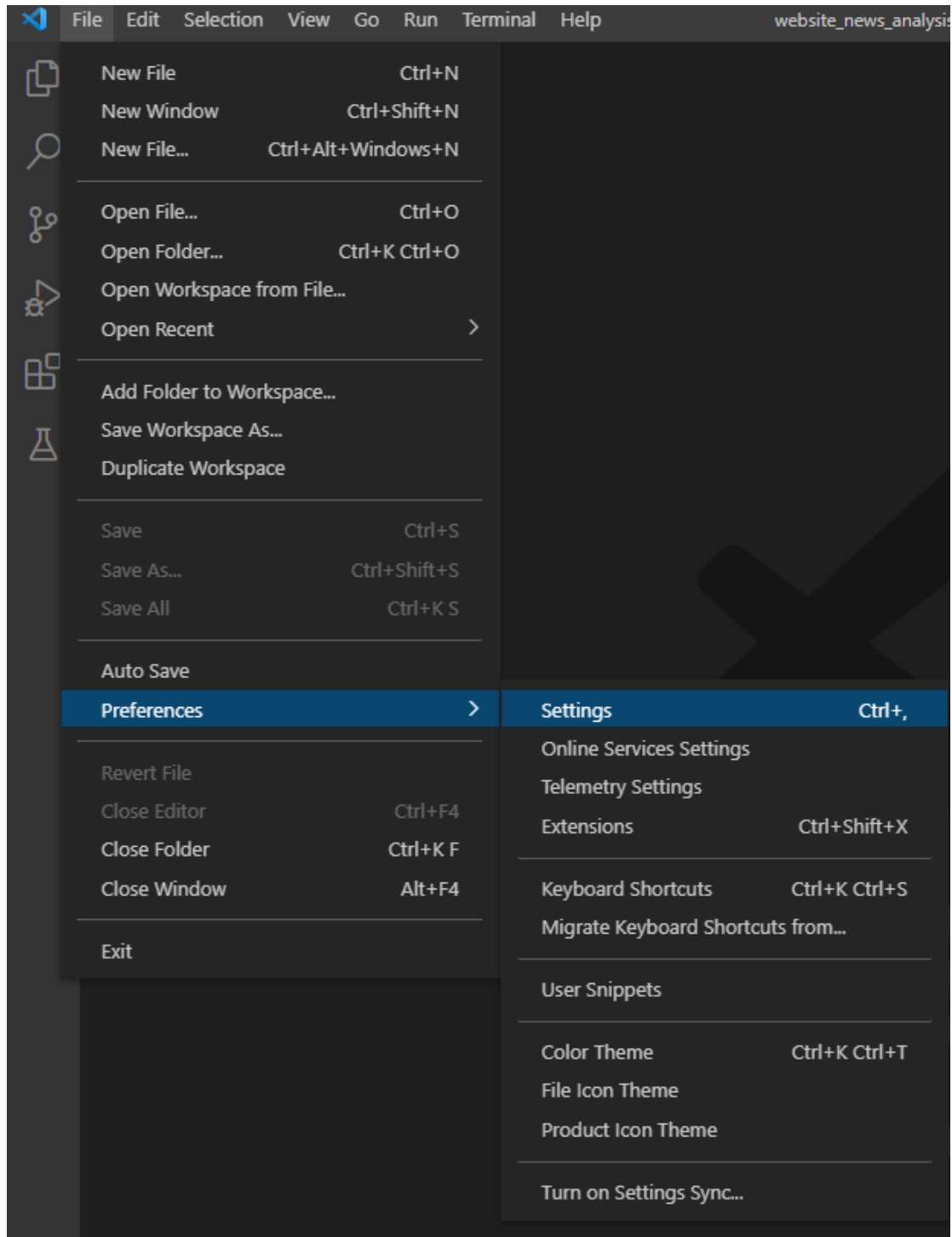
10

5. Auto Rename Tag by Jun Han  
自動重命名配對的 HTML / XML 標籤

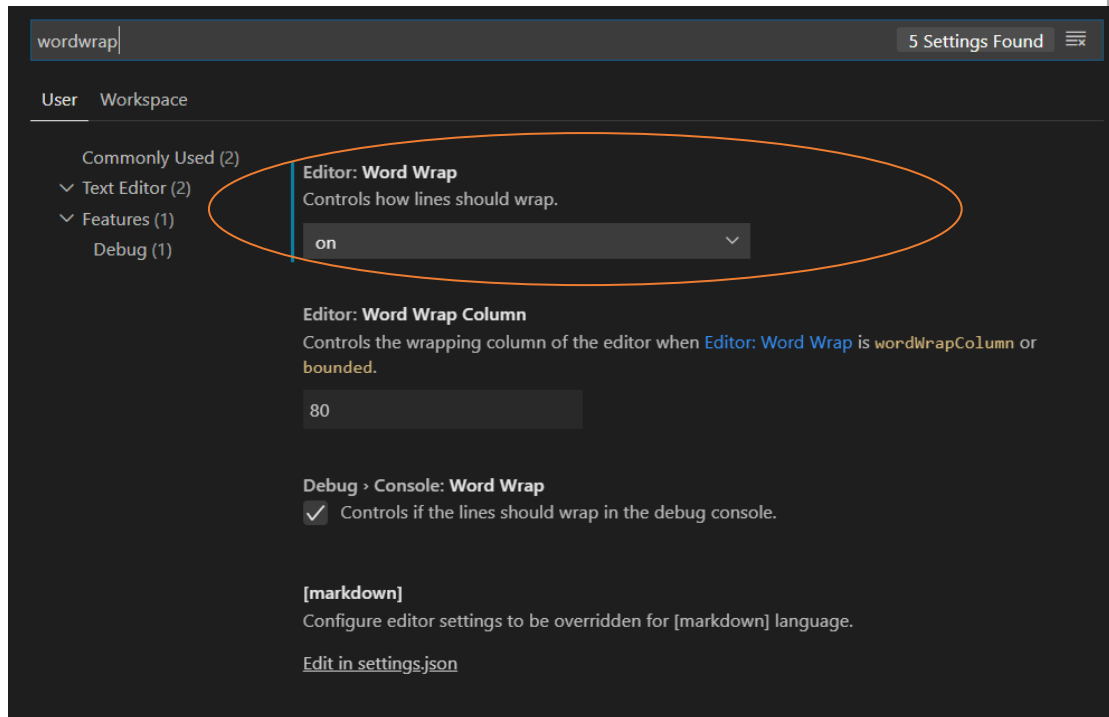
Follow the following steps: search for the packages and then install them.



## Setting and Keyboard shortcut



## Word wrap



## Trigger suggest

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Default: **ctrl+i**, ctrl+space(doesn't work for Chinese OS)

If you want to change to ctrl+\, do the following setting.

File – Preferences – Keyboard shortcut

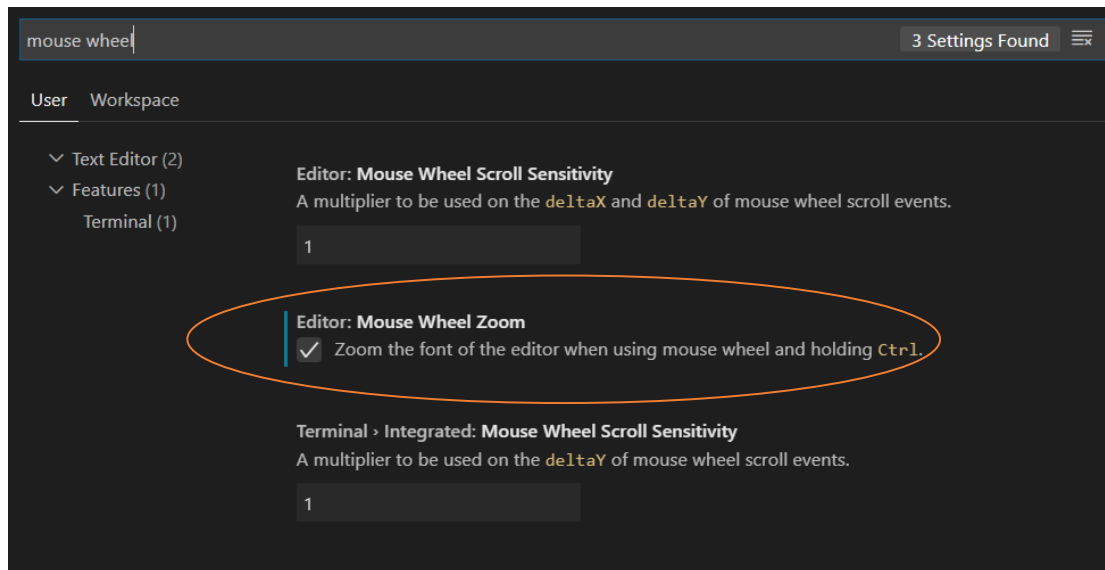
trigger suggest			
Command	Keybinding	When	Source
<b>Trigger Suggest</b> editor.action.triggerSuggest	Ctrl + \	editorHasCompletionItemProvider && textInput...	User

## Mouse wheel zoom

File - Preferences - Setting

Enable the Zoom the font ...

Search for “mouse wheel zoom”



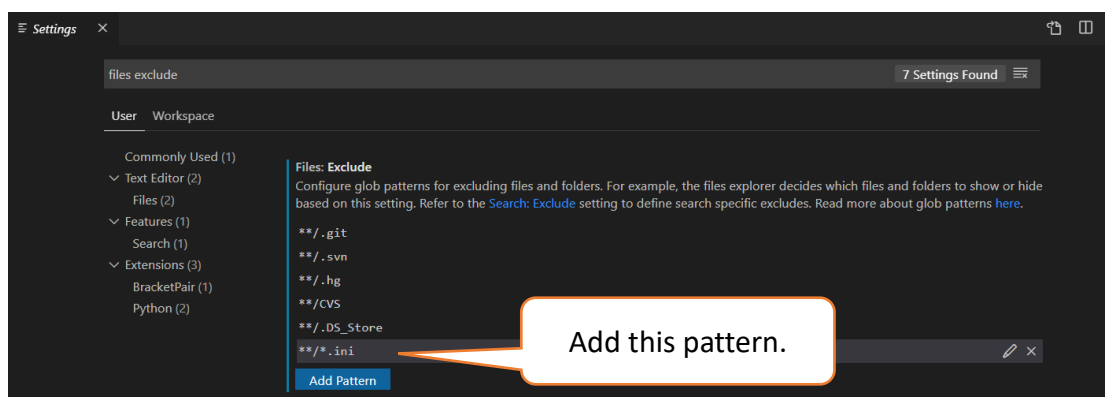
## How To Hide `__pycache__`, `.ini` files in Explorer?

Settings --> Files exclude

Add the following patterns:

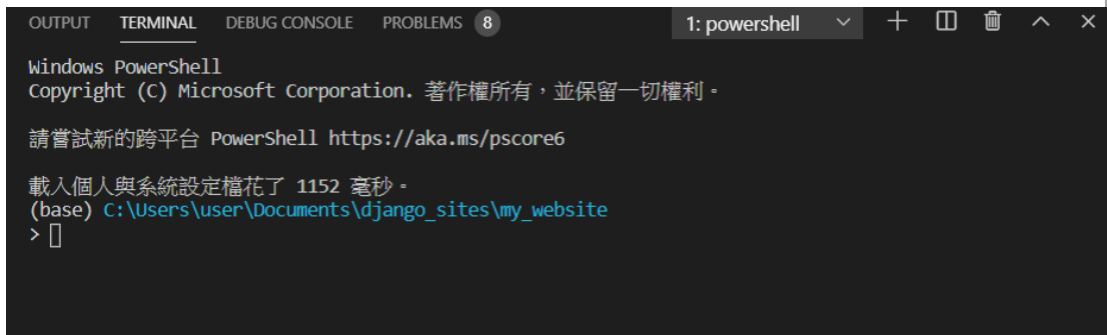
`**/__pycache__`

`**/*.ini`



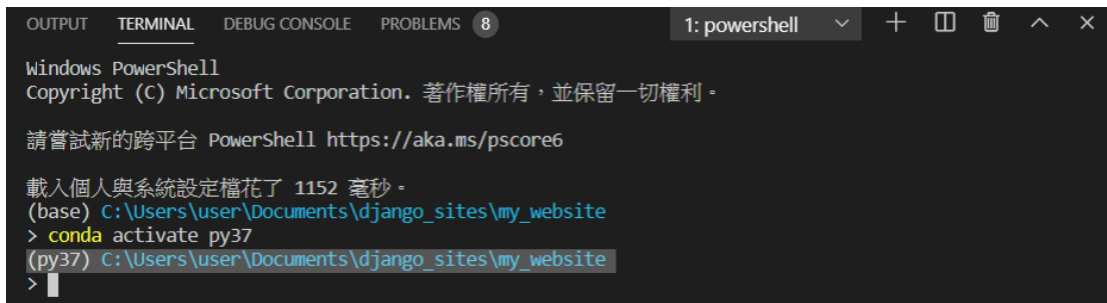
## Terminal

Ctrl+j to open terminal



Now you can activate your python virtual environment.

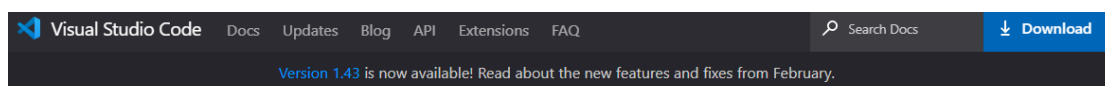
>conda activate py37



## Install VS Code on Mac

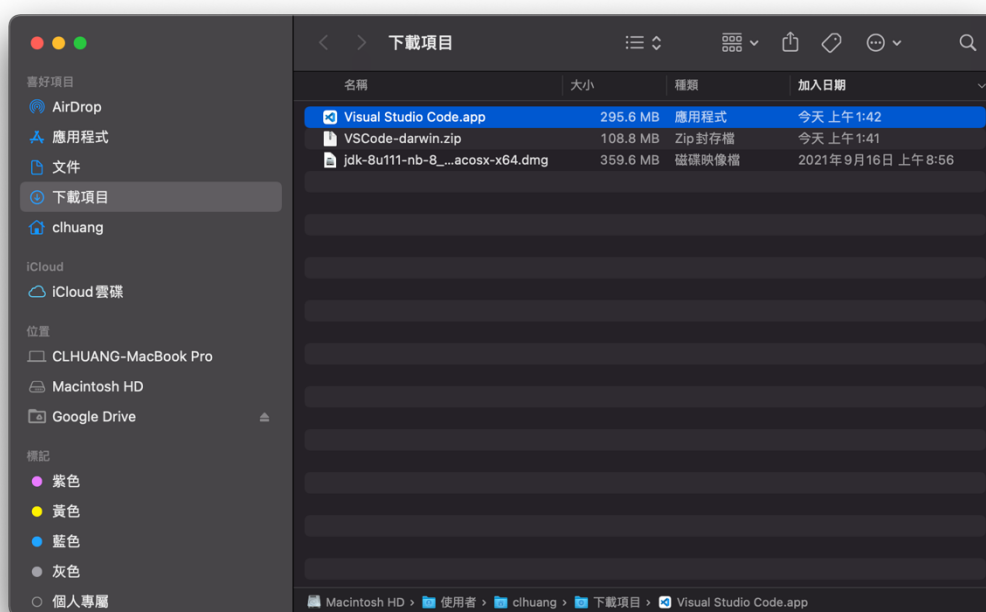
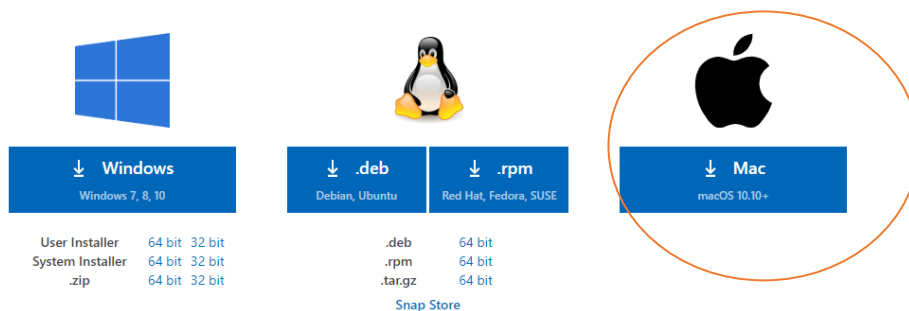
VS Code is one of the best Editor in the world.

You can download Mac version from official website.



## Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.



## Installation#

1. [Download Visual Studio Code](#) for macOS.
2. Open the browser's download list and locate the downloaded archive.
3. Select the 'magnifying glass' icon to open the archive in Finder.
4. Drag **Visual Studio Code.app** to the **Applications** folder, making it available in the macOS Launchpad.



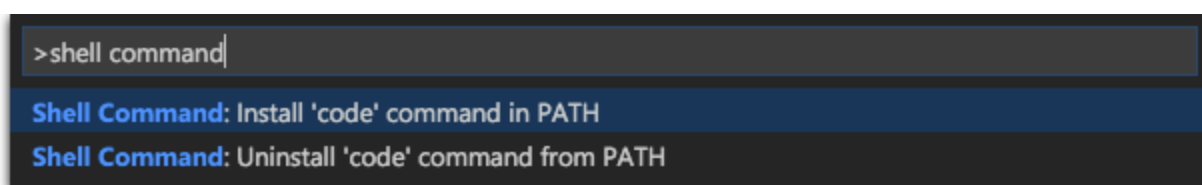
5. Add VS Code to your Dock by right-clicking on the icon to bring up the context menu and choosing **Options, Keep in Dock**.

## Launching from the command line#

You can also run VS Code from the terminal by typing 'code' after adding it to the path:

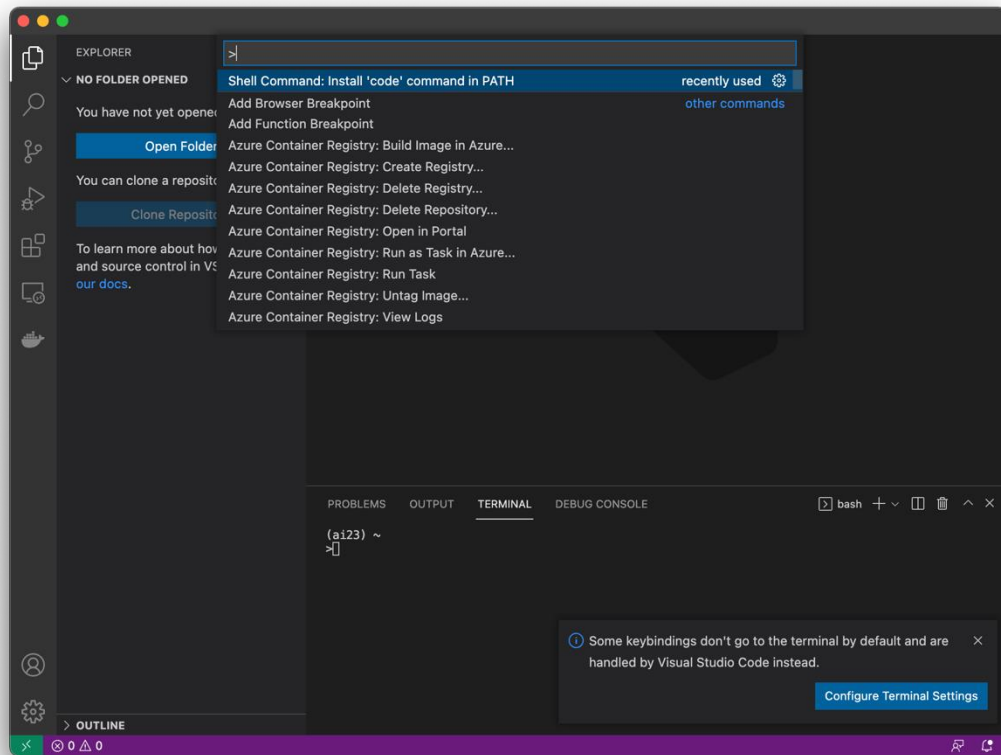
此步驟非常重要: Shell 路徑設定

- Launch VS Code.
- Open the **Command Palette** ([Ctrl+Shift+P](#)) and type 'shell command' to find the **Shell Command: Install 'code' command in PATH** command.



- Restart the terminal for the new `$PATH` value to take effect. You'll be able to type `'code .'` in any folder to start editing files in that folder.

**Note:** If you still have the old `code` alias in your `.bash_profile` (or equivalent) from an early VS Code version, remove it and replace it by executing the **Shell Command: Install 'code' command in PATH** command.



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Official website for vscode installation:

[https://code.visualstudio.com/docs/setup/mac#\\_installation](https://code.visualstudio.com/docs/setup/mac#_installation)

## For mac users who fail to launch conda environment in terminal

可能有極少數同學會遇到此種情況。

在 terminal 中輸入

```
python --version
```

若能正確顯示版本 3 的 python，應該能正常運作。

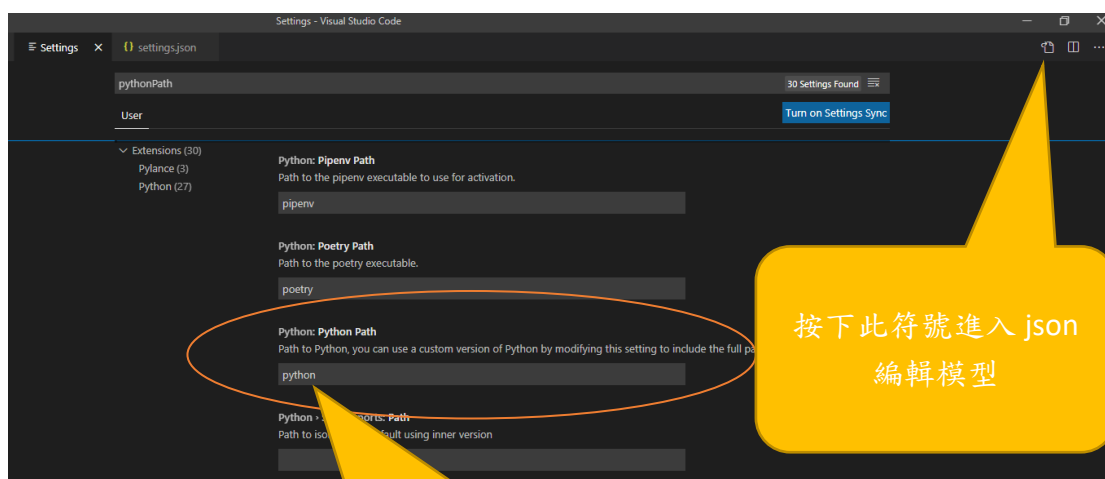
若是顯示版本 2.7 的 python，則可能會有問題。

```
python3 --version
```

應能正確顯示版本 3 的 python。

若你的 vscode 的 terminal 無法切換 conda 虛擬環境，必須做以下設定：

If you fail to activate conda environment in terminal on Mac. Please make sure the correct python path setting:

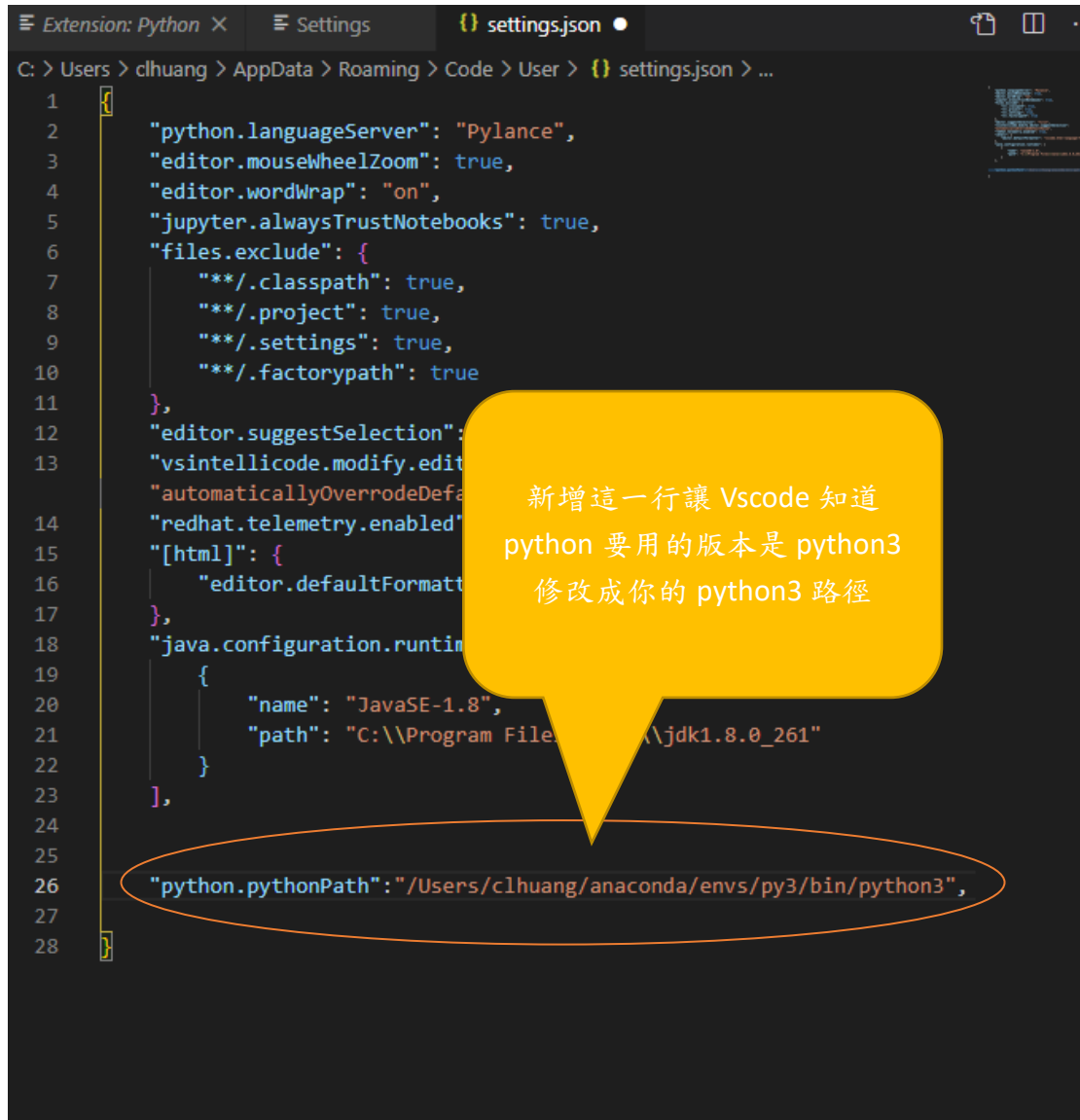


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File - Preferences - Setting  
查詢 pythonPath  
Mac 的路徑

新增這一行，應該就可以了。

```
"python.pythonPath": "/Users/clhuang/anaconda/envs/py3/bin/python3",
```



The image shows a screenshot of the Visual Studio Code editor with the `settings.json` file open. The file path in the breadcrumb is `C:\Users\clhuang\AppData\Roaming\Code\User\settings.json`. The JSON content includes various settings for Python, the editor, and Java. A yellow callout bubble points to the `"python.pythonPath": "/Users/clhuang/anaconda/envs/py3/bin/python3",` line, which is also circled in orange. The callout bubble contains the text: "新增這一行讓 Vscode 知道 python 要用的版本是 python3 修改成你的 python3 路徑".

```
1 {
2   "python.languageServer": "Pylance",
3   "editor.mouseWheelZoom": true,
4   "editor.wordWrap": "on",
5   "jupyter.alwaysTrustNotebooks": true,
6   "files.exclude": {
7     "**/.classpath": true,
8     "**/.project": true,
9     "**/.settings": true,
10    "**/.factorypath": true
11  },
12  "editor.suggestSelection": "first",
13  "vsintellicode.modify.editor.suggestSelection": "automaticallyOverrodeDefaultValue",
14  "redhat.telemetry.enabled": true,
15  "[html]": {
16    "editor.defaultFormatter": "vscode.html",
17  },
18  "java.configuration.runtimes": [
19    {
20      "name": "JavaSE-1.8",
21      "path": "C:\\Program Files\\Java\\jdk1.8.0_261"
22    }
23  ],
24
25  "python.pythonPath": "/Users/clhuang/anaconda/envs/py3/bin/python3",
26
27 }
28
```

