



Python Programming

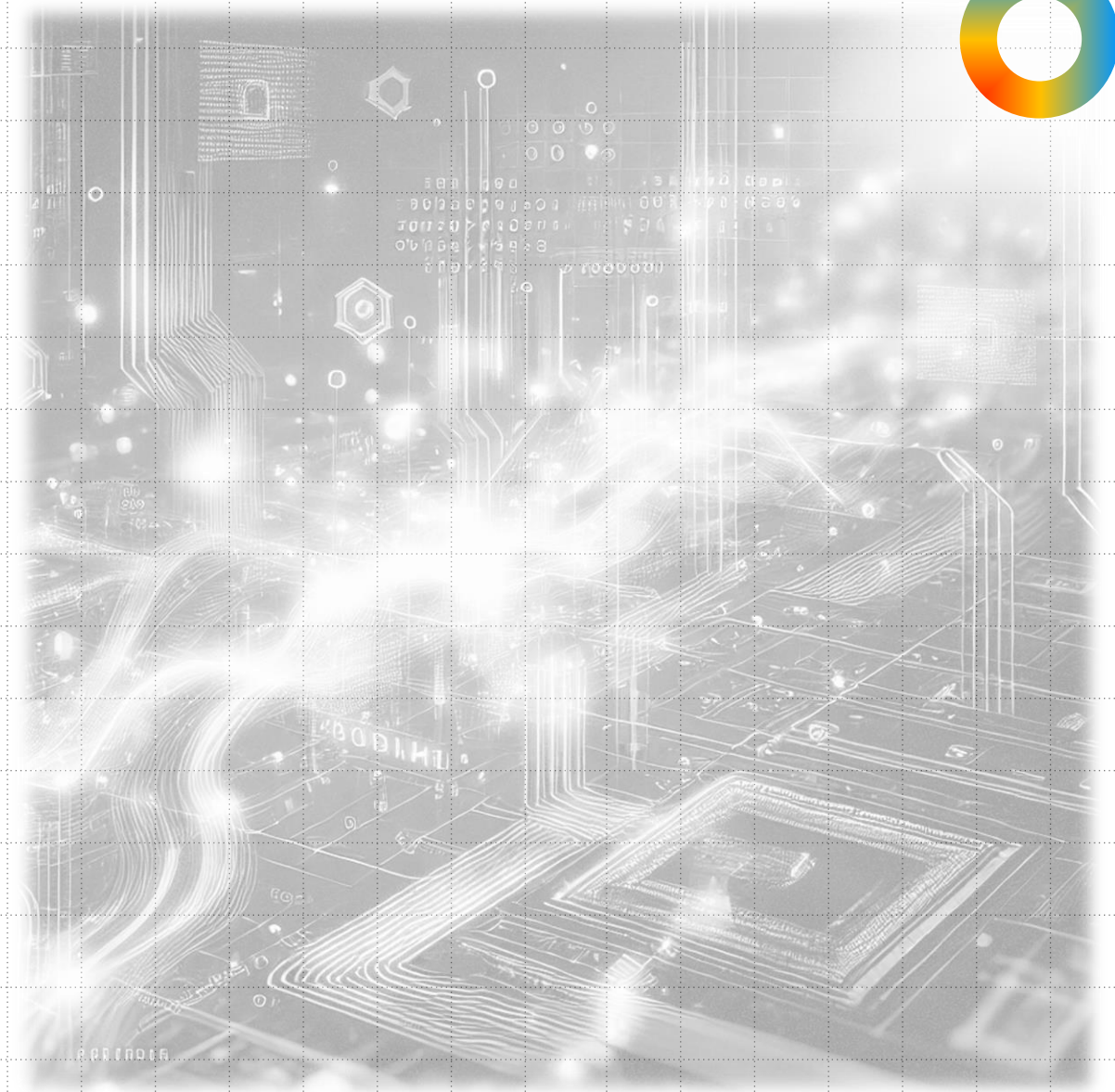
Environment Settings

Dr. Chun-Hsiang Chan
Department of Geography
National Taiwan Normal University



Outlines

- Anaconda Install
- Hello World
- Terminal/ Windows Powershell
- Git



Download Anaconda

- We will use ipython notebook through out the course.
- Here is the download link: <https://www.anaconda.com/download>
- If your computer has no sufficient space for install anaconda, you may consider the light version – miniconda, as follows, <https://docs.conda.io/projects/miniconda/en/latest/miniconda-install.html>

Download Anaconda


- If you only have limited space for python, and then I suggest you may install the following software in order, python, pip, and jupyter.
- Python: <https://www.python.org/downloads/>
- pip: <https://pip.pypa.io/en/stable/installation/>
- Jupyter: <https://jupyter.org/install>


Anaconda Distribution

Free Download

Everything you need to get started in data science on your workstation.

- ✓ Free distribution install
- ✓ Thousands of the most fundamental DS, AI, and ML packages
- ✓ Manage packages and environments from desktop application
- ✓ Deploy across hardware and software platforms

 Code in the Cloud

 Download



Get Additional Installers



Download anaconda for windows/ mac/ linux, depending on your system environment



Open Source

Access the open-source software you need for projects in any field, from data visualization



User-friendly

With our intuitive platform, you can easily search and install packages and create, load,



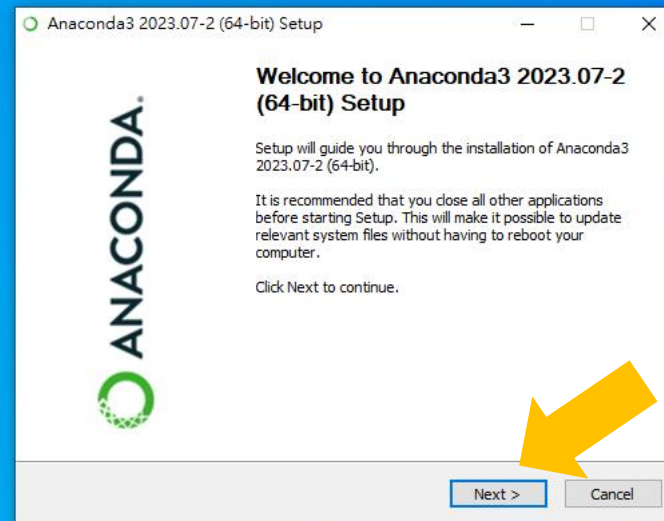
Trusted

Our securely hosted packages and artifacts are methodically tested and regularly updated.

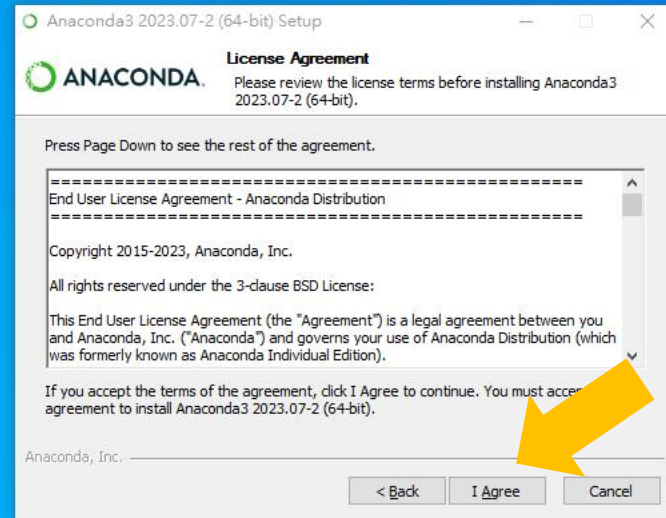


Hey! 🐼 Welcome to Anaconda here to help. What are you looking for today?

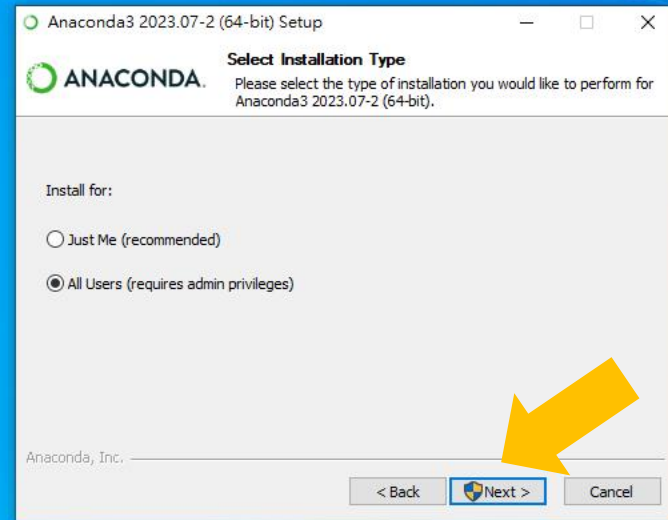
Open the .exe (by Run As Administrator/系統管理員) or .dmg files
Click **Next**



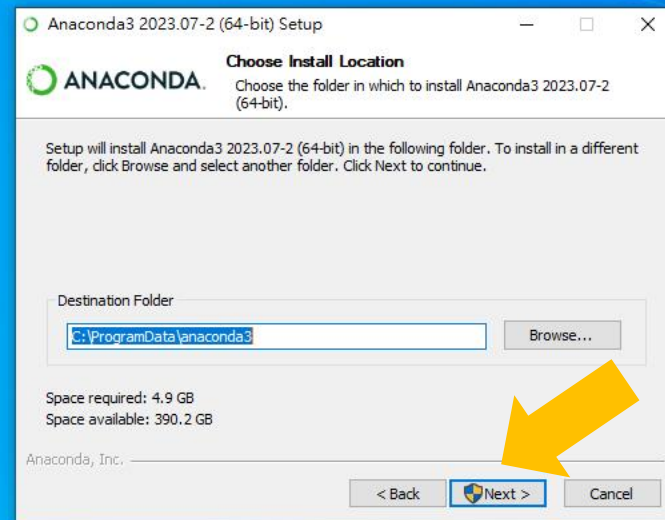
Click “I Agree”



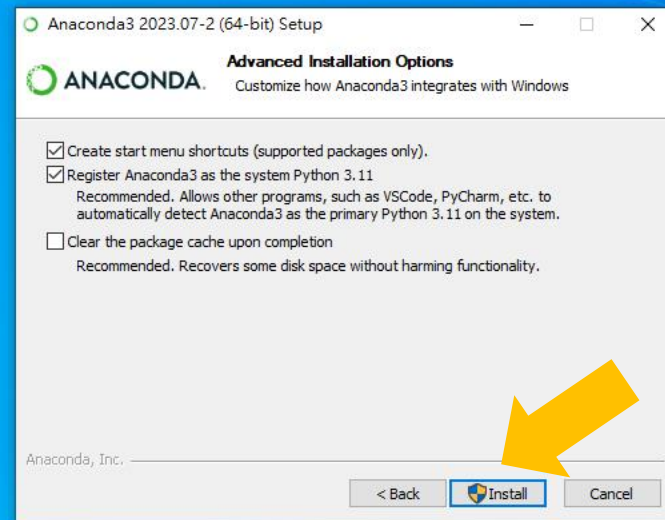
Click “Next”



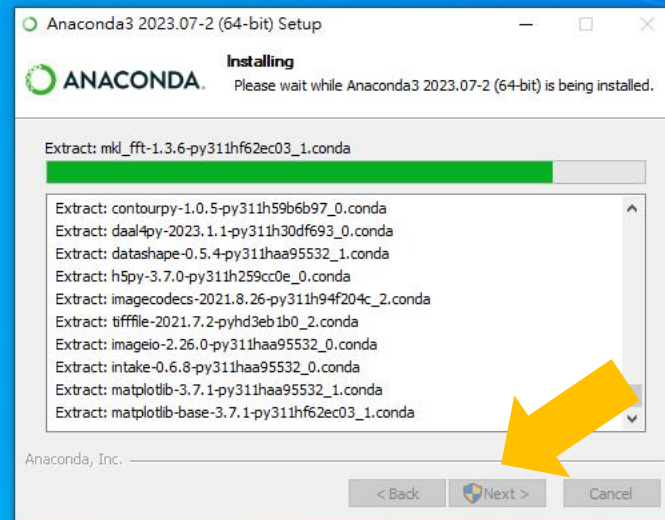
Click “Next”



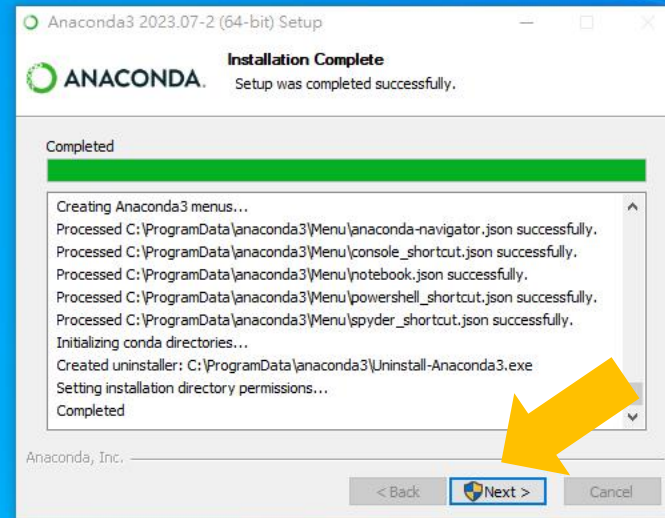
Click “Install”



Click “Next”



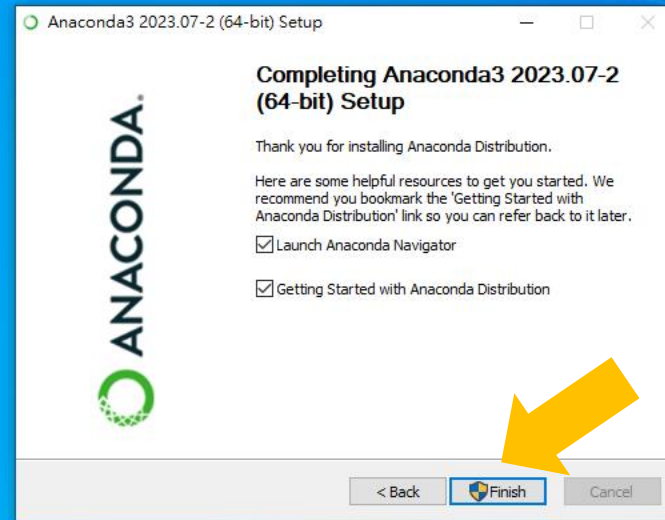
Click “Next”



Click “Next”



Click “**Finish**”



Click "Launch"



Home

Environments

Learning

Community

Anaconda Notebooks New


















Cloud notebooks with hundreds of packages ready to code.

[Learn More](#)

- A Full Python IDE directly from the browser
- Documentation
- Anaconda Blog



All applications
on base (root)
Channels

 <p style="text-align: center;">DataSpell</p> <p style="font-size: small;">DataSpell is an IDE for exploratory data analysis and prototyping machine learning models. It combines the interactivity of Jupyter notebooks with the intelligent Python and R coding assistance of PyCharm in one user-friendly environment.</p> <p style="text-align: center; border: 1px solid green; border-radius: 5px; padding: 2px 5px; color: green;">Install</p>	 <p style="text-align: center;">Anaconda Notebooks</p> <p style="font-size: small;">Cloud-hosted notebook service from Anaconda. Launch a preconfigured environment with hundreds of packages and store project files with persistent cloud storage.</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">CMD.exe Prompt</p> <p style="font-size: small;">0.1.1</p> <p style="font-size: x-small;">Run a cmd.exe terminal with your current environment from Navigator activated</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">JupyterLab</p> <p style="font-size: small;">3.6.3</p> <p style="font-size: x-small;">An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture.</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">Jupyter Notebook</p> <p style="font-size: small;">6.5.4</p> <p style="font-size: x-small;">Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">Powershell Prompt</p> <p style="font-size: small;">0.0.1</p> <p style="font-size: x-small;">Run a Powershell terminal with your current environment from Navigator activated</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>
 <p style="text-align: center;">Qt Console</p> <p style="font-size: small;">5.4.2</p> <p style="font-size: x-small;">PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more.</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">Spyder</p> <p style="font-size: small;">5.4.3</p> <p style="font-size: x-small;">Scientific PYTHON Development Environment. Powerful PYTHON IDE with advanced editing, interactive testing, debugging and introspection features</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">Datalore</p> <p style="font-size: x-small;">Kick-start your data science projects in seconds in a pre-configured environment. Enjoy coding assistance for Python, SQL, and R in Jupyter notebooks and benefit from no-code automations. Use Datalore online for free.</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">IBM Watson Studio Cloud</p> <p style="font-size: x-small;">IBM Watson Studio Cloud provides you the tools to analyze and visualize data, to cleanse and shape data, to create and train machine learning models. Prepare data and build models, using open source data science tools or visual modeling.</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">ORACLE Cloud Infrastructure</p> <p style="font-size: x-small;">Oracle Data Science Service</p> <p style="font-size: x-small;">OCI Data Science offers a machine learning platform to build, train, manage, and deploy your machine learning models on the cloud with your favorite open-source tools</p> <p style="text-align: center; border: 1px solid blue; border-radius: 5px; padding: 2px 5px; color: blue;">Launch</p>	 <p style="text-align: center;">console_shortcut_miniconda</p> <p style="font-size: small;">0.1.1</p> <p style="text-align: center; border: 1px solid green; border-radius: 5px; padding: 2px 5px; color: green;">Install</p>
 <p style="text-align: center;">Glueviz</p> <p style="font-size: small;">1.2.4</p> <p style="font-size: x-small;">Multidimensional data visualization across files. Explore relationships within and among related datasets.</p>	 <p style="text-align: center;">Orange 3</p> <p style="font-size: small;">3.34.0</p> <p style="font-size: x-small;">Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox.</p>	 <p style="text-align: center;">powershell_shortcut_miniconda</p> <p style="font-size: small;">0.0.1</p>	 <p style="text-align: center;">PyCharm Professional</p> <p style="font-size: x-small;">A Full-fledged IDE by JetBrains for both Scientific and Web Python development. Supports HTML, JS, and SQL.</p>	 <p style="text-align: center;">RStudio</p> <p style="font-size: small;">1.1.456</p> <p style="font-size: x-small;">A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks.</p>	



Login

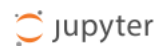
Sign with "email"



Don't have an account yet? [Sign Up](#)

Email Address

Sign In



Quit Logout

Files Running Clusters

Select items to perform actions on them.

Upload New ↕ ↻

<input type="checkbox"/> 0	▼	📁 /	Name ▼	Last Modified	File size
<input type="checkbox"/>	📁	3D Objects		4 年前	
<input type="checkbox"/>	📁	Contacts		4 年前	
<input type="checkbox"/>	📁	Desktop		3 天前	
<input type="checkbox"/>	📁	Documents		3 天前	
<input type="checkbox"/>	📁	Downloads		32 分鐘前	
<input type="checkbox"/>	📁	Favorites		4 年前	
<input type="checkbox"/>	📁	Links		4 年前	
<input type="checkbox"/>	📁	Music		4 年前	
<input type="checkbox"/>	📁	OneDrive		4 天前	
<input type="checkbox"/>	📁	Pictures		4 年前	
<input type="checkbox"/>	📁	Saved Games		4 年前	
<input type="checkbox"/>	📁	Searches		4 年前	
<input type="checkbox"/>	📁	Videos		4 天前	

Click "Documents"



jupyter

Quit **New Folder**

Files Running Clusters

Select items to perform actions on them.

0 / Documents

- ..
- python
- Software
- 自訂 Office 範本

Upload New

- Notebook:
- Python 3 (ipykernel)
- Other:
- Text File
- Folder**
- terminal



Quit Logout

Files Running Clusters

Select items to perform actions on them.

0 / Documents / python

..

The notebook list is empty.

Upload New

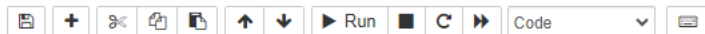
- Notebook:
 - Python 3 (ipykernel)
- Other:
 - Text File
 - Folder
 - Terminal

New Python3





Logout



```
In [ ]: |
```

Cell

Command Mode (press `Esc` to enable)

Edit Shortcuts

- `F`: find and replace
- `↵`: enter edit mode
- `⌘⇧F`: open the command palette
- `⌘⇧P`: open the command palette
- `P`: open the command palette
- `⇧↵`: run cell, select below
- `^↵`: run selected cells
- `⌘↵`: run selected cells
- `⇧↵`: run cell and insert below
- `Y`: change cell to code
- `M`: change cell to markdown
- `R`: change cell to raw
- `1`: change cell to heading 1
- `2`: change cell to heading 2
- `3`: change cell to heading 3
- `4`: change cell to heading 4
- `5`: change cell to heading 5
- `6`: change cell to heading 6
- `K`: select cell above
- `↑`: select cell above
- `↓`: select cell below
- `J`: select cell below
- `⇧K`: extend selected cells above
- `⇧↑`: extend selected cells above
- `⇧↓`: extend selected cells below
- `⇧J`: extend selected cells below
- `⌘A`: select all cells
- `A`: insert cell above
- `B`: insert cell below
- `X`: cut selected cells
- `C`: copy selected cells
- `⇧V`: paste cells above
- `V`: paste cells below
- `Z`: undo cell deletion
- `D`, `⌘D`: delete selected cells
- `⇧M`: merge selected cells, or current cell with cell below if only one cell is selected
- `⌘S`: Save and Checkpoint
- `S`: Save and Checkpoint
- `L`: toggle line numbers
- `O`: toggle output of selected cells
- `⇧O`: toggle output scrolling of selected cells
- `H`: show keyboard shortcuts
- `I`, `⌘I`: interrupt the kernel
- `⌘0`, `⌘⌘`: restart the kernel (with dialog)
- `Esc`: close the pager
- `Q`: close the pager
- `⇧L`: toggles line numbers in all

Hello World















 jupyter **Untitled** Last Checkpoint: a minute ago (unsaved changes)



Logout

File Edit View Insert Cell Kernel Widgets Help

Trusted | Python 3 (ipykernel) 

         Run    Code  

```
In [1]: import os
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

```
In [2]: print('Hello World!')
Hello World!
```

```
In [ ]: |
```

Rename Notebook

Enter a new notebook name:

Rename

Untitled

Cancel Rename

```
In [1]: import os
import pandas
import numpy
import matplotlib

In [2]: print('Hello World!')
Hello World!

In [ ]:
```


Rename Notebook

Enter a new notebook name:

Week 01 Hello World

Cancel Rename

Rename



```
In [1]: import os  
import pandas  
import numpy  
import matplotlib
```

```
In [2]: print('Hello World!')  
Hello World!
```

```
In [ ]:
```

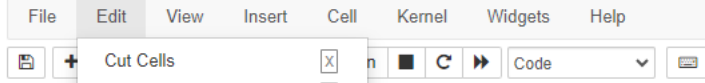


- New Notebook
- Open...
- Make a Copy...
- Save as...
- Rename...
- Save and Checkpoint Ctrl-S
- Revert to Checkpoint
- Print Preview
- Download as
- Trusted Notebook
- Close and Halt

Open/ Save/ Copy/ Download
Download as ... PDF / HTML / ...



```
as  
as np  
tlib.pyplot as plt  
  
World!')
```



- Cut Cells [X]
- Copy Cells [C]
- Paste Cells Above [Shift-V]
- Paste Cells Below [V]
- Paste Cells & Replace
- Delete Cells [D, D]
- Undo Delete Cells [Z]
- Split Cell [Ctrl-Shift-Minus]
- Merge Cell Above
- Merge Cell Below
- Move Cell Up
- Move Cell Down
- Edit Notebook Metadata
- Find and Replace
- Cut Cell Attachments
- Copy Cell Attachments
- Paste Cell Attachments
- Insert Image



Cell Part

Cut (X) / Copy (C) / Delete (DD) / Paste (V) / ...



```
In [1]: import os
import pandas
import numpy
import matplotlib

In [2]: print('Hello World!')

In [ ]:
```



Run Cell/ Run All (Above/ Below)



```
In [1]: import os
import pandas as pd
import numpy as np
import matplotlib.p

In [2]: print('Hello World!')
Hello World!

In [ ]:
```

- Interrupt
- Restart
- Restart & Clear Output
- Restart & Run All
- Reconnect
- Shutdown
- Change kernel



Kernel: Interrupt/ Restart (Clear/ All)/ Reconnect/ Shutdown



```
In [1]: import os
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

In [2]: print('Hello World!')
Hello World!

In [ ]:
```

- User Interface Tour
- Keyboard Shortcuts **H**
- Edit Keyboard Shortcuts
-
- Notebook Help
- Markdown
-
- Python Reference
- IPython Reference
- NumPy Reference
- SciPy Reference
- Matplotlib Reference
- SymPy Reference
- pandas Reference
-
- About



Shortcuts

```
import matplotlib.pyplot as plt
```

```
In [2]: print('Hello World!')  
Hello World!
```

```
In [3]: a = [0,1,2,3,4,5,6]  
        b = [2,4,6,8,10,11,12]
```

list

Run few codes for fun

```
In [4]: print(a)  
[0, 1, 2, 3, 4, 5, 6]
```

Print variable

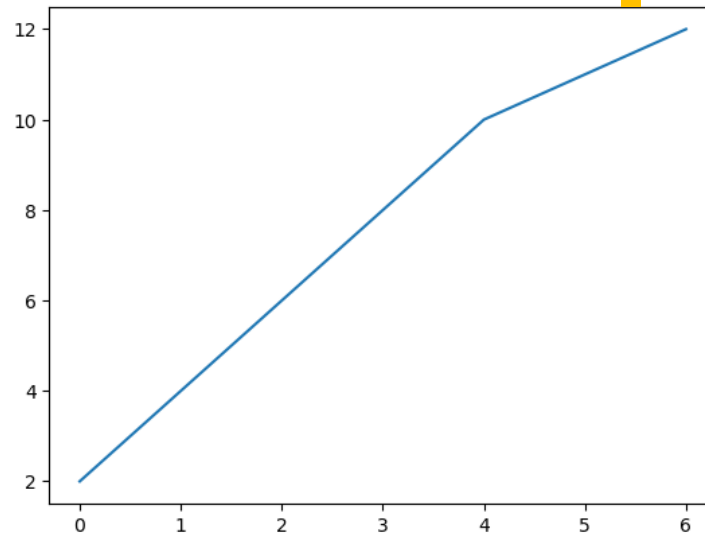
```
In [5]: a
```

View variable

```
Out[5]: [0, 1, 2, 3, 4, 5, 6]
```

```
In [6]: plt.plot(a, b)  
        plt.show()
```

Plot variable



Home

















Environments

Learning

Community

All applications ▾ on base (root) ▾ Channels

Close Jupyter

 <p>DataSpell</p> <p>DataSpell is an IDE for exploratory data analysis and prototyping machine learning models. It combines the interactivity of Jupyter notebooks with the intelligent Python and R coding assistance of PyCharm in one user-friendly environment.</p> <p>Install</p>	 <p>Anaconda Notebooks</p> <p>Cloud-hosted notebook service from Anaconda. Launch a preconfigured environment with hundreds of packages and store project files with persistent cloud storage.</p> <p>Launch</p>	 <p>CMD.exe Prompt</p> <p>Run a command prompt in your environment.</p> <p>Launch</p>	 <p>JupyterLab</p> <p>3.6.3 Environment for interactive computing, based on the notebook and Architecture.</p> <p>Launch</p>	 <p>Notebook</p> <p>6.5.4 Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.</p> <p>Launch</p>	 <p>Powershell Prompt</p> <p>0.0.1 Run a Powershell terminal with your current environment from Navigator activated</p> <p>Launch</p>
 <p>Qt Console</p> <p>5.4.2 PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more.</p> <p>Launch</p>	 <p>Spyder</p> <p>5.4.3 Scientific PYTHON Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features</p> <p>Launch</p>	 <p>Data Science Studio Cloud</p> <p>Kick-start your data science journey in seconds. Enjoy data science from the cloud with no-code automations. Use Data Science Studio online for free.</p> <p>Launch</p>	 <p>ORACLE Cloud Infrastructure</p> <p>Oracle Data Science Service OCI Data Science offers a machine learning platform to build, train, manage, and deploy your machine learning models on the cloud with your favorite open-source tools</p> <p>Launch</p>	 <p>console_shortcut_miniconda</p> <p>0.1.1</p> <p>Install</p>	
 <p>Glueviz</p> <p>1.2.4 Multidimensional data visualization across files. Explore relationships within and among related datasets.</p>	 <p>Orange 3</p> <p>3.34.0 Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox.</p>	 <p>powershell_shortcut_miniconda</p> <p>0.0.1</p>	 <p>PyCharm Professional</p> <p>A full-fledged IDE by JetBrains for both Scientific and Web Python development. Supports HTML, JS, and SQL.</p>	 <p>RStudio</p> <p>1.1.456 A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks.</p>	

Close running applications ✕

There are some applications running. Please select the applications you want to close on quit:

- notebook

Don't show again

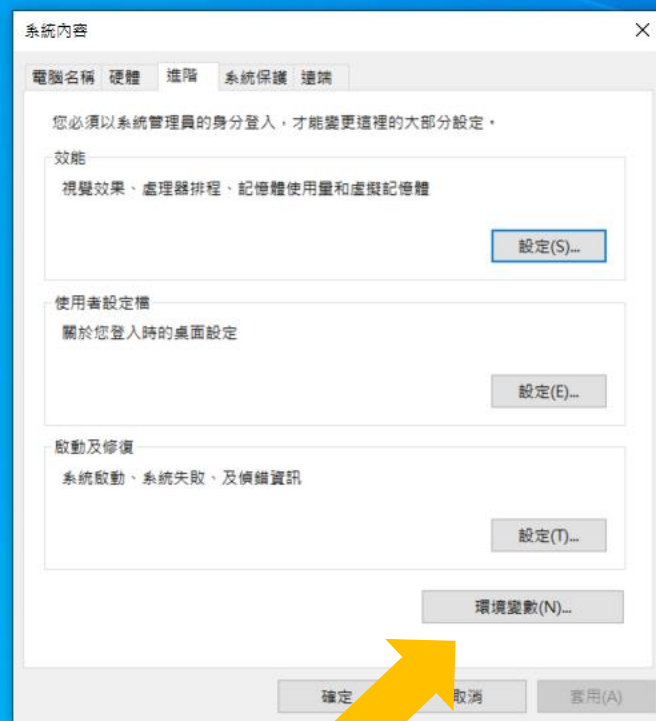
[Cancel](#) [Quit](#)

The duration of opening anaconda for jupyter notebook is quite long.
Here, we may open jupyter in terminal ... but for windows users ...

Set System
Env



The screenshot shows the Windows 10 'System' window. The left sidebar contains navigation links: '控制台首頁', '裝置管理員', '遠端設定', '系統保護', and '進階系統設定'. A yellow arrow points from the text 'Set System Env' to the '進階系統設定' link. The main content area displays system information under the heading '檢視電腦的基本資訊'. It includes sections for 'Windows 版本' (Windows 10 專業教育版), '系統' (System) with details like 'Intel(R) Core(TM) i7-4700HQ CPU @ 2.40GHz', '已安裝記憶體 (RAM) 16.0 GB', and '電腦名稱、網域及工作群組設定' (Computer name, domain, and workgroup settings) with fields for '電腦名稱', '完整電腦名稱', '電腦描述', and '工作群組'.



Click “環境變數”

Select "Path"



環境變數

TooDou 的使用者變數(U)

變數	值
OneDrive	C:\Users\TooDou\OneDrive
Path	C:\Users\TooDou\AppData\Local\Microsoft...
TEMP	C:\Users\TooDou\AppData\Local\Temp
TMP	C:\Users\TooDou\AppData\Local\Temp

新增(N)... 編輯(E)... 刪除(D)

系統變數(S)

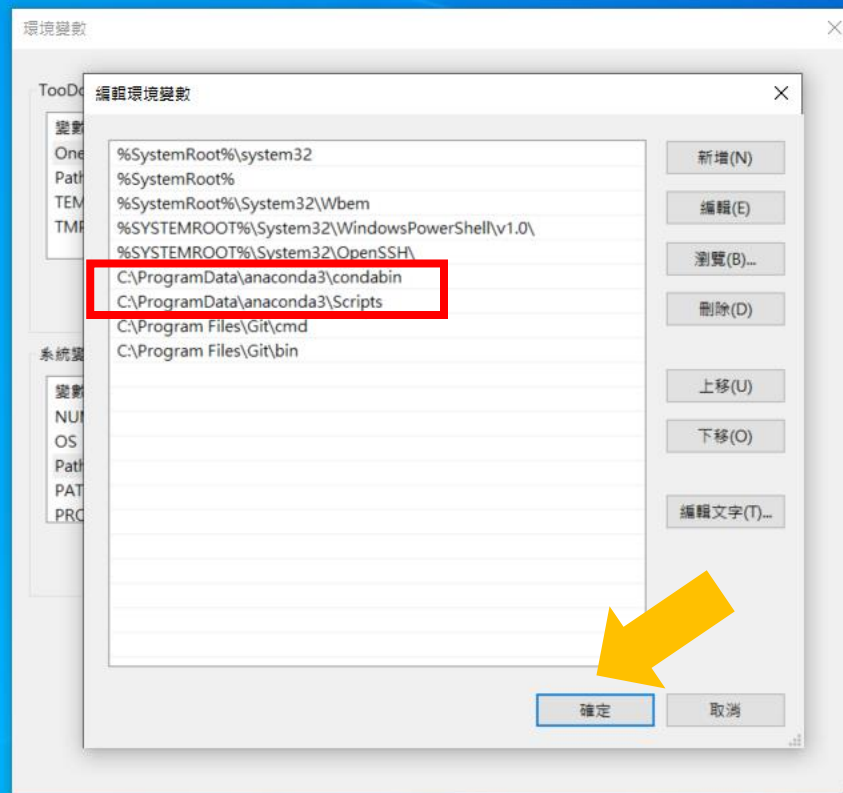
變數	值
OS	Windows_NT
Path	C:\Windows\system32;C:\Windows\C:\Wind...
PATHEXT	.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;...
PROCESSOR_ARC...	AMD64
PROCESSOR_IDEN...	Intel64 Familv 6 Model 60 Steppoing 3. Genu...

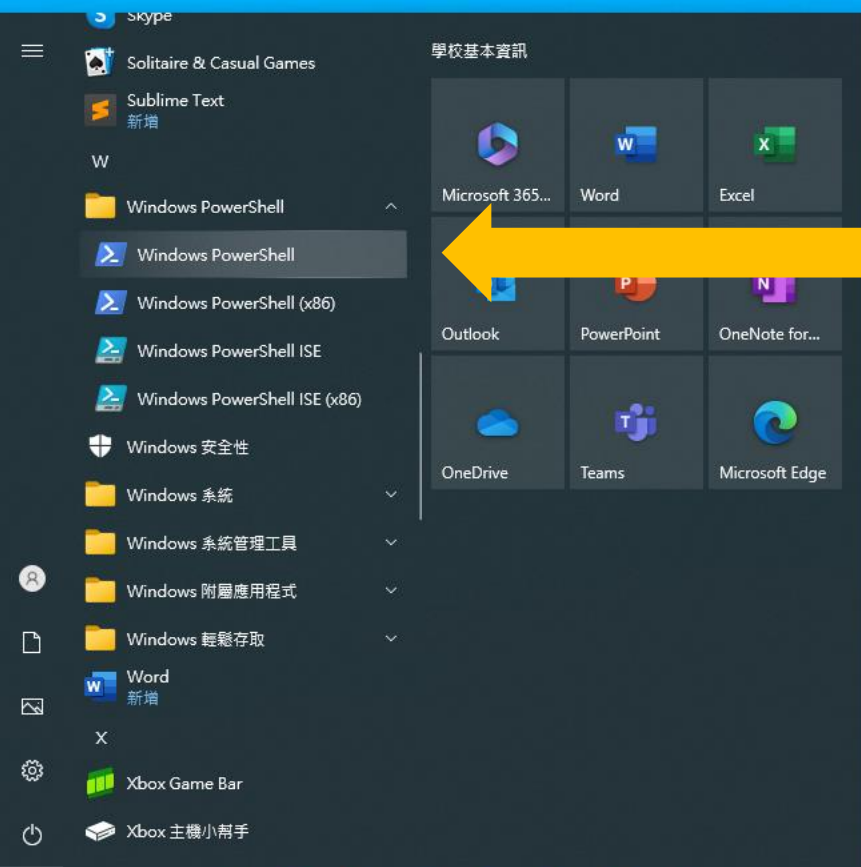
新增(W)... 編輯(I)... 刪除(L)

確定 取消

Click "編輯"

Set “環境變數” (environmental variables)

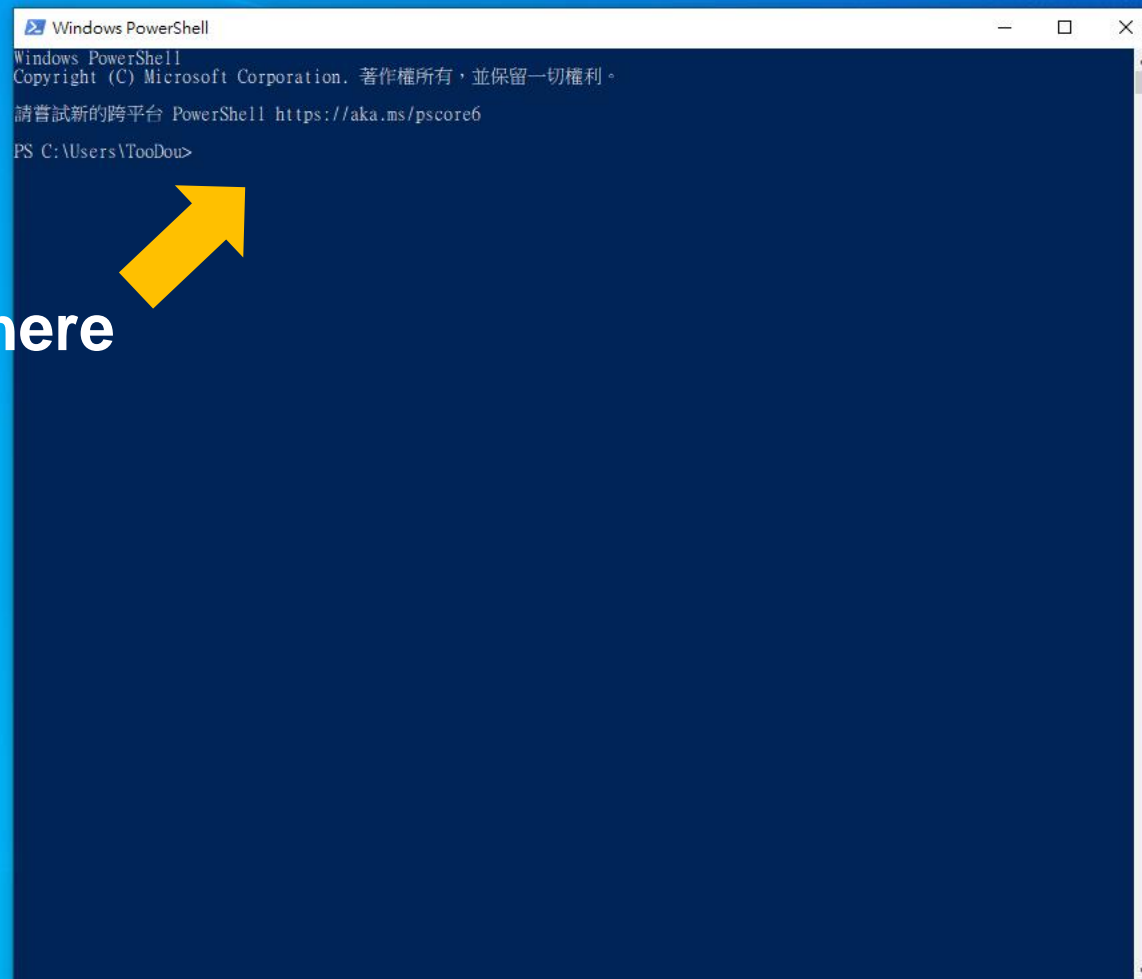




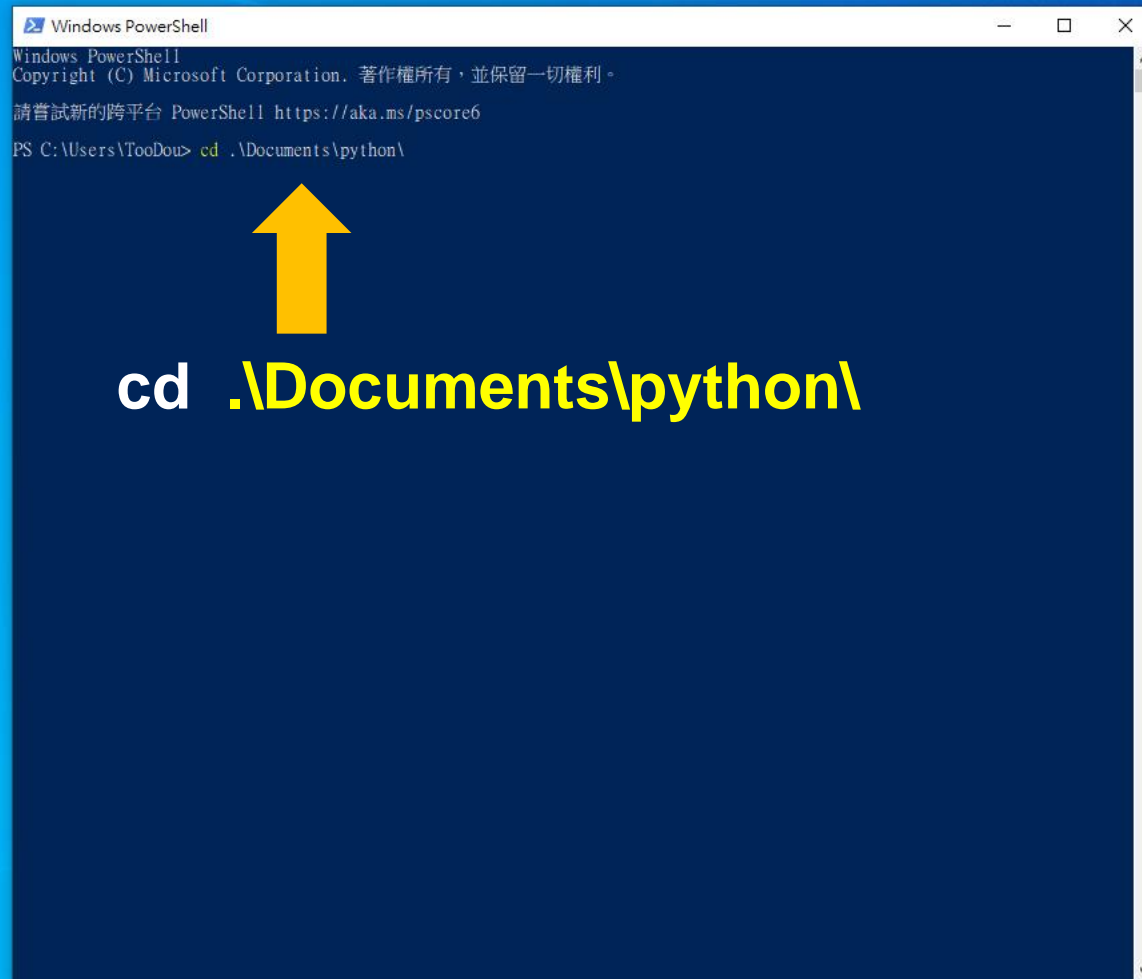
Open "Windows PowerShell"

Chun-Hsiang Chan (2026)

Type here



```
Windows PowerShell
Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。
請嘗試新的跨平台 PowerShell https://aka.ms/pscore6
PS C:\Users\TouDou>
```



The image shows a Windows PowerShell terminal window with a dark background. The window title is "Windows PowerShell". The text inside the window reads: "Windows PowerShell", "Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。", "請嘗試新的跨平台 PowerShell <https://aka.ms/pscore6>", and "PS C:\Users\TooDou> cd .\Documents\python\". A large yellow arrow points upwards from the command text below to the command text inside the terminal. Below the arrow, the command "cd .\Documents\python\" is written in large yellow text.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。
請嘗試新的跨平台 PowerShell https://aka.ms/pscore6
PS C:\Users\TooDou> cd .\Documents\python\
```

cd .\Documents\python

```
Windows PowerShell
Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。
請嘗試新的跨平台 PowerShell https://aka.ms/pscore6

PS C:\Users\TooDou> cd .\Documents\python\
PS C:\Users\TooDou\Documents\python>
```



Already move to
.\Documents\python

```
Windows PowerShell
Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。
請嘗試新的跨平台 PowerShell https://aka.ms/pscore6

PS C:\Users\TooDou> cd .\Documents\python\
PS C:\Users\TooDou\Documents\python> jupyter notebook
```



Type "jupyter notebook"

```
Windows PowerShell
Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。

請嘗試新的跨平台 PowerShell https://aka.ms/pscore6

PS C:\Users\TooDou> cd .\Documents\python\
PS C:\Users\TooDou\Documents\python> jupyter notebook

JupyterLab

Read the migration plan to Notebook 7 to learn about the new features and the actions to take if you are using extensions.
https://jupyter-notebook.readthedocs.io/en/latest/migrate_to_notebook7.html

Please note that updating to Notebook 7 might break some of your extensions.

[W 21:05:26.715 NotebookApp] Loading JupyterLab as a classic notebook (v6) extension.
[I 2023-09-10 21:05:26.730 LabApp] JupyterLab extension loaded from C:\ProgramData\anaconda3\Lib\site-packages\jupyterlab
[I 2023-09-10 21:05:26.730 LabApp] JupyterLab application directory is C:\ProgramData\anaconda3\share\jupyter\lab
[I 21:05:28.605 NotebookApp] The port 8888 is already in use, trying another port.
[I 21:05:28.621 NotebookApp] Serving notebooks from local directory: C:\Users\TooDou\Documents\python
[I 21:05:28.621 NotebookApp] Jupyter Notebook 6.5.4 is running at:
[I 21:05:28.621 NotebookApp] http://localhost:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
[I 21:05:28.621 NotebookApp] or http://127.0.0.1:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
[I 21:05:28.621 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 21:05:28.636 NotebookApp]

To access the notebook, open this file in a browser:
file:///C:/Users/TooDou/AppData/Roaming/jupyter/runtime/nbserver-1700-open.html
Or copy and paste one of these URLs:
http://localhost:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
or http://127.0.0.1:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
0.00s - Debugger warning: It seems that frozen modules are being used, which may
0.00s - make the debugger miss breakpoints. Please pass -Xfrozen_modules=off
0.00s - to python to disable frozen modules.
0.00s - Note: Debugging will proceed. Set PYDEVD_DISABLE_FILE_VALIDATION=1 to disable this validation.
```



Successfully Open

Chun-Hsiang Chan (2026)

```
Windows PowerShell
Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。

請嘗試新的跨平台 PowerShell https://aka.ms/pscore6

PS C:\Users\TooDou> cd .\Documents\python\
PS C:\Users\TooDou\Documents\python> jupyter notebook

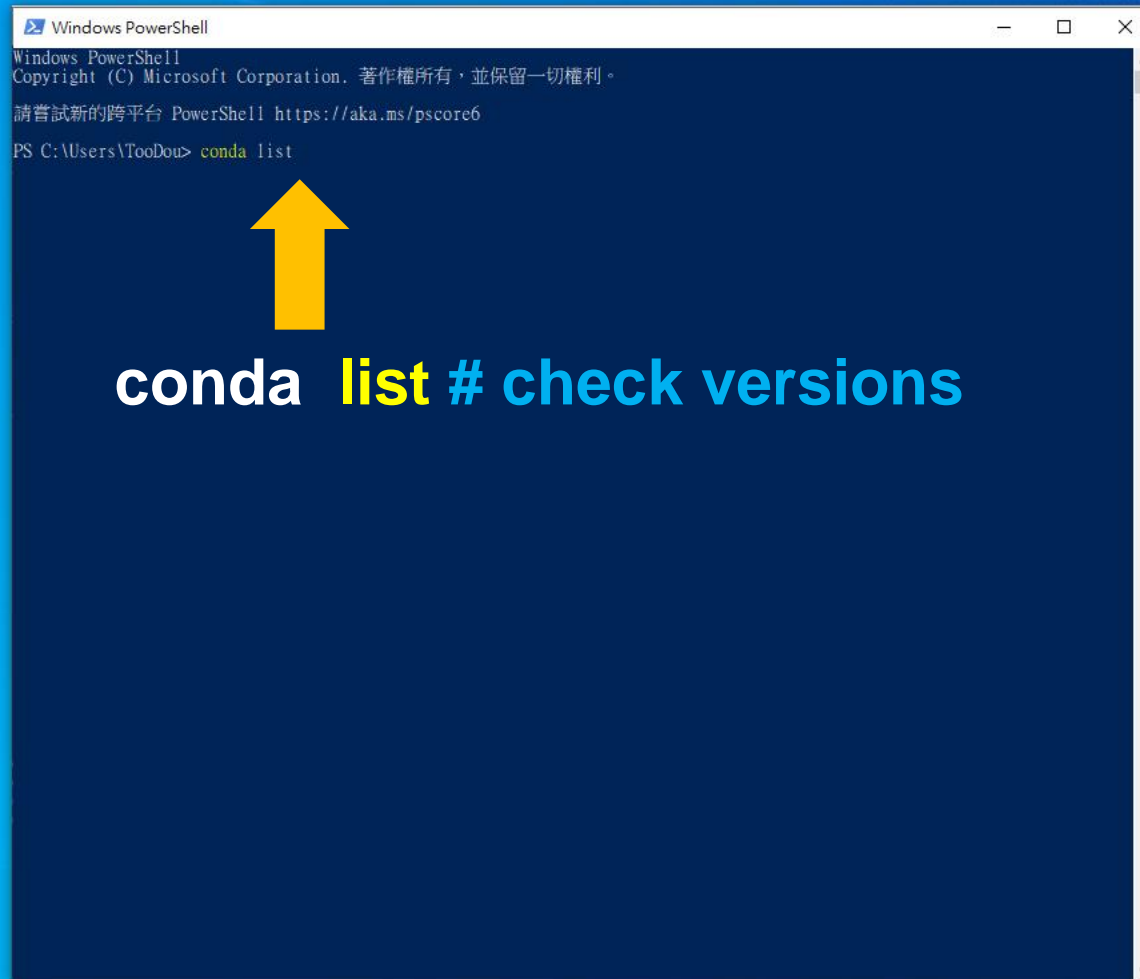
JupyterLab

Read the migration plan to Notebook 7 to learn about the new features and the actions to take if you are using extensions.
https://jupyter-notebook.readthedocs.io/en/latest/migrate_to_notebook7.html

Please note that updating to Notebook 7 might break some of your extensions.

[W 21:05:26.715 NotebookApp] Loading JupyterLab as a classic notebook (v6) extension.
[I 2023-09-10 21:05:26.730 LabApp] JupyterLab extension loaded from C:\ProgramData\anaconda3\Lib\site-packages\jupyterlab
[I 2023-09-10 21:05:26.730 LabApp] JupyterLab application directory is C:\ProgramData\anaconda3\share\jupyter\lab
[I 21:05:28.605 NotebookApp] The port 8888 is already in use, trying another port.
[I 21:05:28.621 NotebookApp] Serving notebooks from local directory: C:\Users\TooDou\Documents\python
[I 21:05:28.621 NotebookApp] Jupyter Notebook 6.5.4 is running at:
[I 21:05:28.621 NotebookApp] http://localhost:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
[I 21:05:28.621 NotebookApp] or http://127.0.0.1:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
[I 21:05:28.621 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 21:05:28.636 NotebookApp]

To access the notebook, open this file in a browser:
file:///C:/Users/TooDou/AppData/Roaming/jupyter/runtime/nbserver-1700-open.html
Or copy and paste one of these URLs:
http://localhost:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
or http://127.0.0.1:8889/?token=6356c005fbf11b6373096b48229effda59ab940cae0467f0
0.00s - Debugger warning: It seems that frozen modules are being used, which may
0.00s - make the debugger miss breakpoints. Please pass -Xfrozen_modules=off
0.00s - to python to disable frozen modules.
0.00s - Note: Debugging will proceed. Set PYDEVD_DISABLE_FILE_VALIDATION=1 to disable this validation.
[I 21:17:33.645 NotebookApp] Interrupted...
[I 21:17:33.645 NotebookApp] Shutting down 0 kernels
[I 21:17:33.645 NotebookApp] Shutting down 0 terminals
PS C:\Users\TooDou\Documents\python>
```



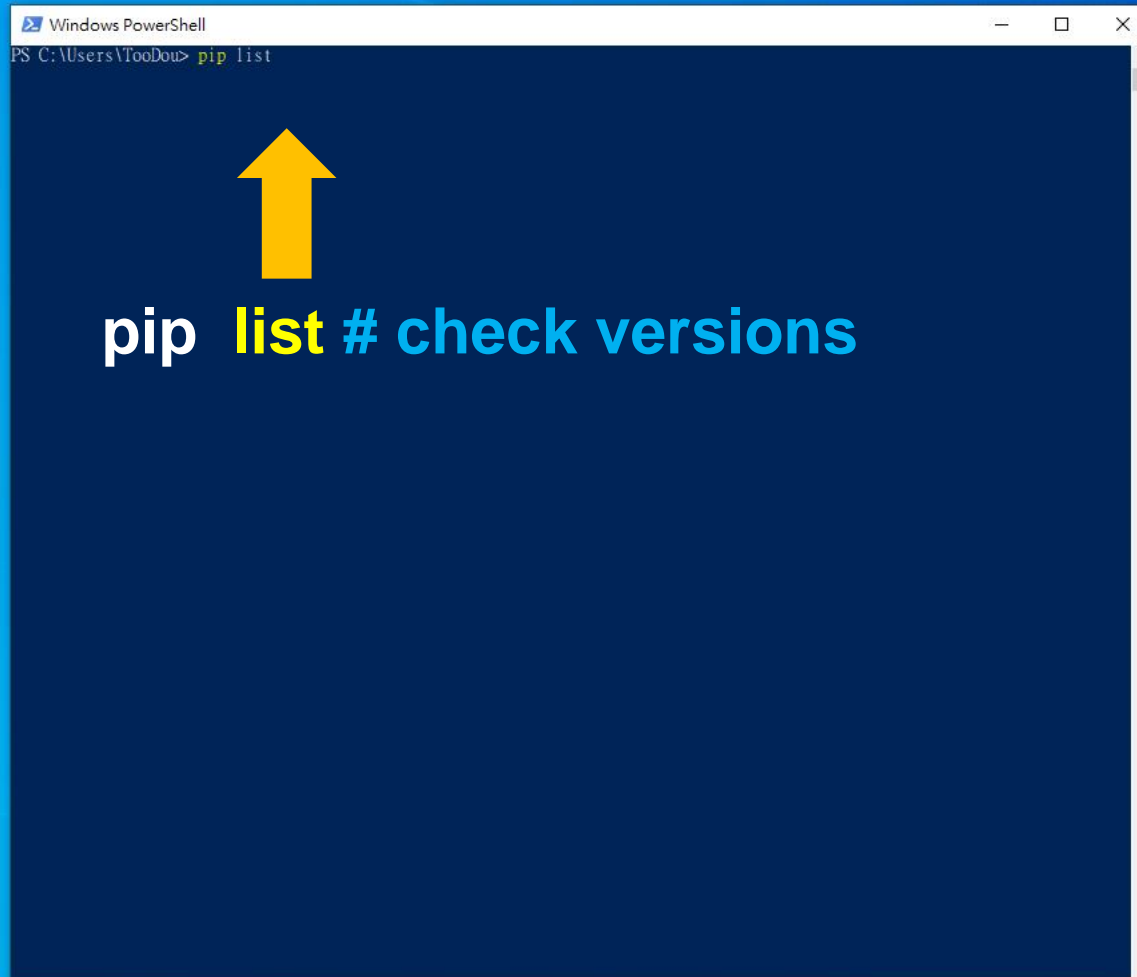
```
Windows PowerShell
Copyright (C) Microsoft Corporation. 著作權所有，並保留一切權利。
請嘗試新的跨平台 PowerShell https://aka.ms/pscore6
PS C:\Users\TooDou> conda list
```

conda list # check versions

```
Windows PowerShell
toolz 0.12.0 py311haa95532_0
tornado 6.3.2 py311h2bbff1b_0
tqdm 4.65.0 py311h746a85d_0
traitlets 5.7.1 py311haa95532_0
transformers 2.1.1 pyhd3eb1b0_0
twisted 22.10.0 py311h2bbff1b_0
twisted-iocpsupport 1.0.2 py311h2bbff1b_0
typing-extensions 4.7.1 py311haa95532_0
typing_extensions 4.7.1 py311haa95532_0
tzdata 2023c h04d1e81_0
uc-micro-py 1.0.1 py311haa95532_0
ujson 5.4.0 py311hd77b12b_0
unicodecode 1.2.0 pyhd3eb1b0_0
urllib3 1.26.16 py311haa95532_0
utf8proc 2.6.1 h2bbff1b_0
vc 14.2 h21ff451_1
vs2015_runtime 14.27.29016 h5e58377_2
w3lib 1.21.0 pyhd3eb1b0_0
watchdog 2.1.6 py311haa95532_0
wcwidth 0.2.5 pyhd3eb1b0_0
webencodings 0.5.1 py311haa95532_1
websocket-client 0.58.0 py311haa95532_4
werkzeug 2.2.3 py311haa95532_0
whatthepatch 1.0.2 py311haa95532_0
wheel 0.38.4 py311haa95532_0
widgetsnbextension 4.0.5 py311haa95532_0
win_inet_pton 1.1.0 py311haa95532_0
winpty 0.4.3 4
wrap 1.14.1 py311h2bbff1b_0
xarray 2023.6.0 py311haa95532_0
xlwings 0.29.1 py311haa95532_0
xyzservices 2022.9.0 py311haa95532_1
xz 5.4.2 h8cc25b3_0
y-py 0.5.9 py311hb6bf4ef_0
yaml 0.2.5 he774522_0
yaml-cpp 0.7.0 hd77b12b_1
yapf 0.31.0 pyhd3eb1b0_0
yarl 1.8.1 py311h2bbff1b_0
ypy-websocket 0.8.2 py311haa95532_0
zeromq 4.3.4 hd77b12b_0
zip 0.5.5 hd77b12b_6
zict 2.2.0 py311haa95532_0
zipp 3.11.0 py311haa95532_0
zlib 1.2.13 h8cc25b3_0
zlib-ng 2.0.7 h2bbff1b_0
zope 1.0 py311haa95532_1
zope.interface 5.4.0 py311h2bbff1b_0
zstandard 0.19.0 py311h2bbff1b_0
zstd 1.5.5 hd43e919_0
PS C:\Users\TooDou>
```



All packages
versions

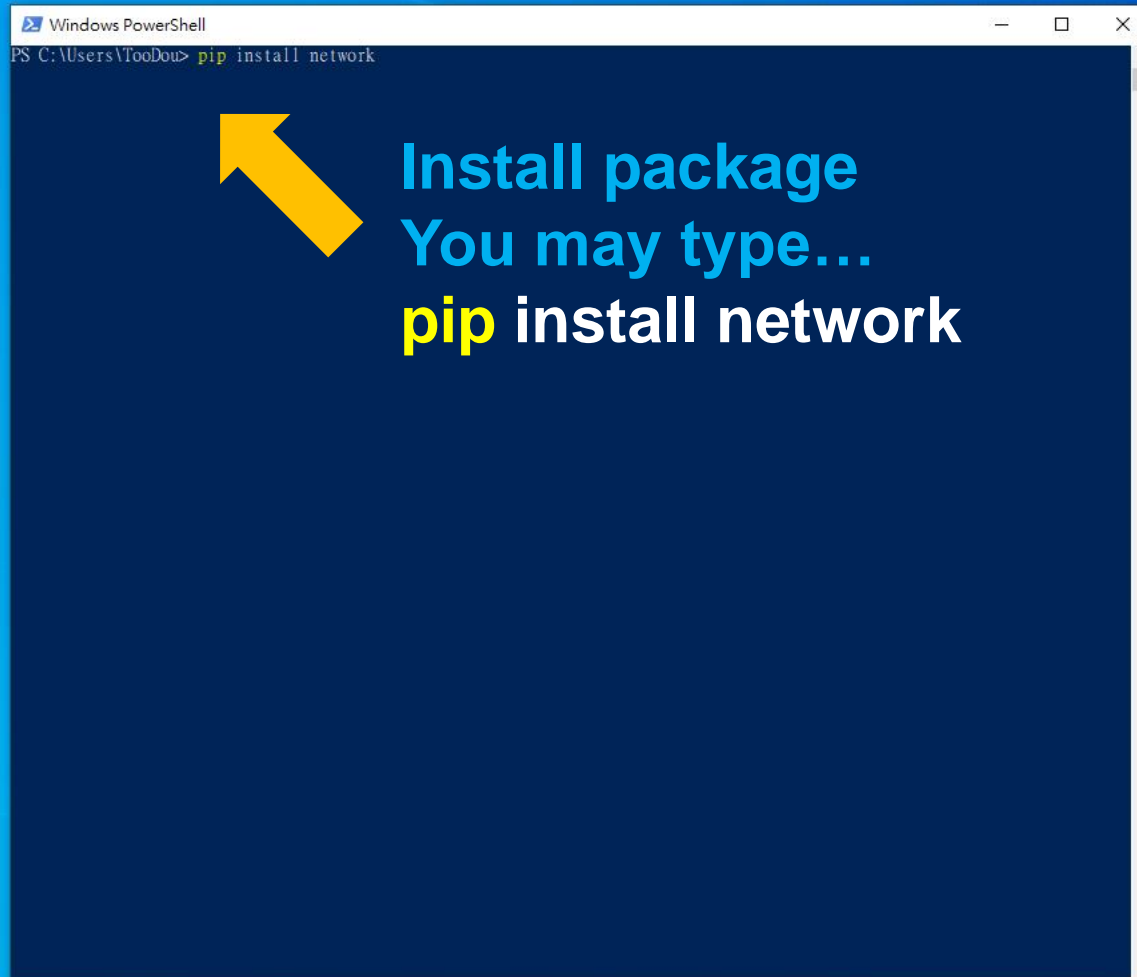


```
Windows PowerShell
PS C:\Users\TtooDou> pip list
```

↑
pip list # check versions

```
Windows PowerShell
tables 3.8.0
tabulate 0.8.10
TBB 0.2
tblib 1.7.0
tenacity 8.2.2
terminado 0.17.1
text-unidecode 1.3
textdistance 4.2.1
threadpoolctl 2.2.0
three-merge 0.1.1
tiffifile 2021.7.2
tinycss2 1.2.1
tldextract 3.2.0
toml 0.10.2
tomlkit 0.11.1
toolz 0.12.0
tornado 6.3.2
tqdm 4.65.0
traitlets 5.7.1
transformers 2.1.1
Twisted 22.10.0
twisted-iocpsupport 1.0.2
typing_extensions 4.7.1
uc-micro-py 1.0.1
ujson 5.4.0
Unidecode 1.2.0
urllib3 1.26.16
w3lib 1.21.0
watchdog 2.1.6
wewidth 0.2.5
webencodings 0.5.1
websocket-client 0.58.0
Werkzeug 2.2.3
whatthepatch 1.0.2
wheel 0.38.4
widgetsnbextension 4.0.5
win-inet-pton 1.1.0
wrapt 1.14.1
xarray 2023.6.0
xlwings 0.29.1
xyzservices 2022.9.0
y-py 0.5.9
yapf 0.31.0
yarl 1.8.1
ypy-websocket 0.8.2
zict 2.2.0
zipp 3.11.0
zope.interface 5.4.0
zstandard 0.19.0
PS C:\Users\TTooDou>
```

 **All packages
versions**



Windows PowerShell

```
PS C:\Users\TooDou> pip install network
```

Install package
You may type...
pip install network

The image shows a Windows PowerShell terminal window with a dark blue background. The title bar reads 'Windows PowerShell'. The command prompt shows 'PS C:\Users\TooDou> pip install network'. A yellow arrow points from the text 'Install package You may type... pip install network' to the 'pip' command in the terminal. The text is in a light blue font, with 'pip' highlighted in yellow.

```
Windows PowerShell
PS C:\Users\TooDou> pip install network
Defaulting to user installation because normal site-packages is not writeable
Collecting network
  Downloading network-0.1.tar.gz (2.8 kB)
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: network
  Building wheel for network (setup.py) ... done
  Created wheel for network: filename=network-0.1-py3-none-any.whl size=3143 sha256=67bb1cf52bf367ee4cf62188eb5b51870c4b8f90cbece8231d84f3d72a69e7e2
  Stored in directory: c:\users\toodou\appdata\local\pip\cache\wheels\3a\9a\4\341d3b109494a43a5cdd444ca83be3a4bfe8c1267ad9f85332
Successfully built network
Installing collected packages: network
Successfully installed network-0.1
PS C:\Users\TooDou> .
```



Install package
You may type...
Successfully
installed

```
Windows PowerShell
PS C:\Users\TooDou> pip install network
Defaulting to user installation because normal site-packages is not writeable
Collecting network
  Downloading network-0.1.tar.gz (2.8 kB)
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: network
  Building wheel for network (setup.py) ... done
  Created wheel for network: filename=network-0.1-py3-none-any.whl size=3143 sha256=67bb1cf52bf367ee4cf62188eb5b51870c4b8f90cbece8231d84f3d72a69e7e2
  Stored in directory: c:\users\toodou\appdata\local\pip\cache\wheels\3a\9a\4\341d3b109494a43a5cdd444ca83be3a4bfe8c1267ad9f85332
Successfully built network
Installing collected packages: network
Successfully installed network-0.1
PS C:\Users\TooDou> conda install seaborn
```



Install package
You may type...
pip install seaborn

```
Windows PowerShell
PS C:\Users\TooDou> pip install network
Defaulting to user installation because normal site-packages is not writeable
Collecting network
  Downloading network-0.1.tar.gz (2.8 kB)
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: network
  Building wheel for network (setup.py) ... done
  Created wheel for network: filename=network-0.1-py3-none-any.whl size=3143 sha256=67bb1cf52bf367ee4cf62188eb5b51870c4b8f90cbece8231d84f3d72a69e7e2
  Stored in directory: c:\users\toodou\appdata\local\pip\cache\wheels\3a\9a\4\341d3b109494a43a5cdd444ca83be3a4bfe8c1267ad9f85332
Successfully built network
Installing collected packages: network
Successfully installed network-0.1
PS C:\Users\TooDou> conda install seaborn
Collecting package metadata (current_repodata.json): - DEBUG:urllib3.connectionpool:Starting new HTTPS connection (1): r
epo.anaconda.com:443
DEBUG:urllib3.connectionpool:Starting new HTTPS connection (1): repo.anaconda.com:443
DEBUG:urllib3.connectionpool:Starting new HTTPS connection (1): repo.anaconda.com:443
DEBUG:urllib3.connectionpool:Starting new HTTPS connection (1): repo.anaconda.com:443
DEBUG:urllib3.connectionpool:Starting new HTTPS connection (1): repo.anaconda.com:443
DEBUG:urllib3.connectionpool:Starting new HTTPS connection (1): repo.anaconda.com:443
\ DEBUG:urllib3.connectionpool:https://repo.anaconda.com:443 "GET /pkgs/msys2/noarch/current_repodata.json HTTP/1.1" 200
None
DEBUG:urllib3.connectionpool:https://repo.anaconda.com:443 "GET /pkgs/main/win-64/current_repodata.json HTTP/1.1" 200 Ne
ne
DEBUG:urllib3.connectionpool:https://repo.anaconda.com:443 "GET /pkgs/r/win-64/current_repodata.json HTTP/1.1" 200 None
DEBUG:urllib3.connectionpool:https://repo.anaconda.com:443 "GET /pkgs/main/noarch/current_repodata.json HTTP/1.1" 200 Ne
ne
DEBUG:urllib3.connectionpool:https://repo.anaconda.com:443 "GET /pkgs/msys2/win-64/current_repodata.json HTTP/1.1" 200 N
one
DEBUG:urllib3.connectionpool:https://repo.anaconda.com:443 "GET /pkgs/r/noarch/current_repodata.json HTTP/1.1" 200 None
done
Solving environment: done
# All requested packages already installed.
PS C:\Users\TooDou>
PS C:\Users\TooDou>
PS C:\Users\TooDou> .
```



Install package
You may type...
Successfully
installed

The entire [Pro Git book](#) written by Scott Chacon and Ben Straub is available to read [online for free](#). Dead tree versions are available on [Amazon.com](#).

Downloads

 [macOS](#)  [Windows](#)

 [Linux/Unix](#)



Older releases are available and the [Git source repository](#) is on GitHub.

GUI Clients

Git comes with built-in GUI tools ([git-gui](#), [gitk](#)), but there are several third-party tools for users looking for a platform-specific experience.

[View GUI Clients →](#)

Logos

Various Git logos in PNG (bitmap) and EPS (vector) formats are available for use in online and print projects.

[View Logos →](#)

Git via Git

If you already have Git installed, you can get the latest development version via Git itself:

```
git clone https://github.com/git/git
```

You can also always browse the current contents of the git repository using the [web interface](#).

When you need something from GitHub, and you will need this ...

The entire [Pro Git book](#) written by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Download for Windows

[Click here to download](#) the latest (**2.42.0**) **64-bit** version of **Git for Windows**. This is the most recent **maintained build**. It was released **11 days ago**, on 2023-08-30.

Other Git for Windows downloads

- Standalone Installer
- [32-bit Git for Windows Setup.](#)
- [64-bit Git for Windows Setup.](#)**

- Portable ("thumbdrive edition")
- [32-bit Git for Windows Portable.](#)

- [64-bit Git for Windows Portable.](#)

Using winget tool

Install [winget tool](#) if you don't already have it, then type this command in command prompt or Powershell.

```
winget install --id Git.Git -e --source winget
```

The current source code release is version **2.42.0**. If you want the newer version, you can build it from [the source code](#).

Now What?

Now that you have downloaded Git, it's time to start using it.



Read the Book

Dive into the Pro Git book and learn at your own pace.



Download a GUI

Several free and commercial GUI tools are available for the Windows platform.



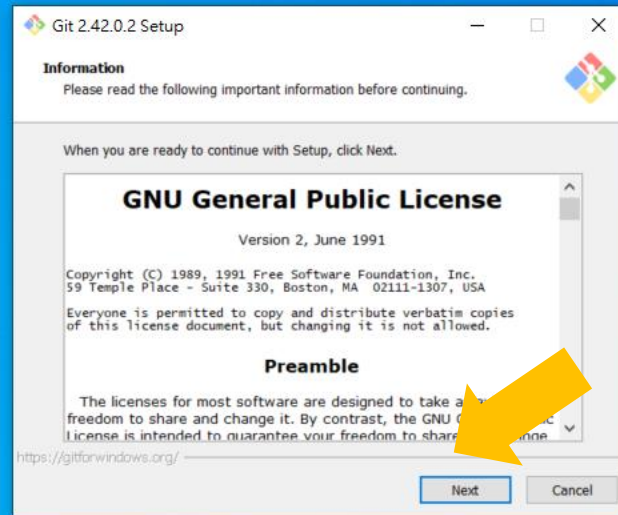
Get Involved

A knowledgeable Git community is available to answer your questions.

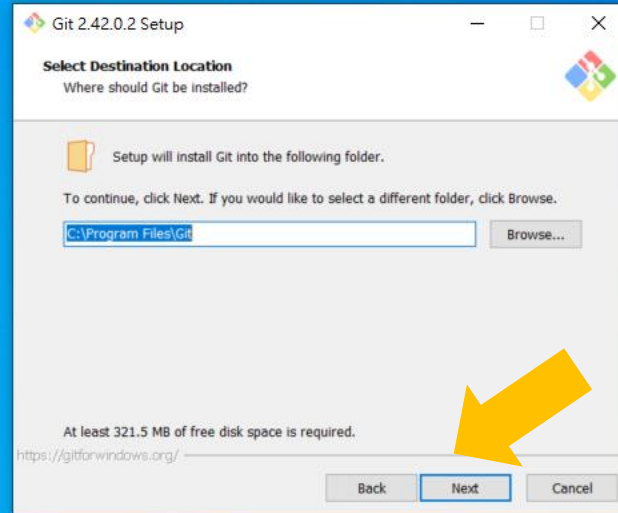


**Download here
If your computer is
windows ...**

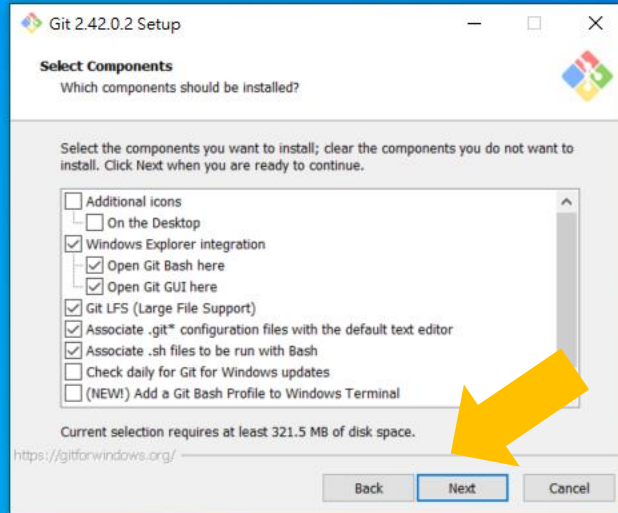
Click “Next”



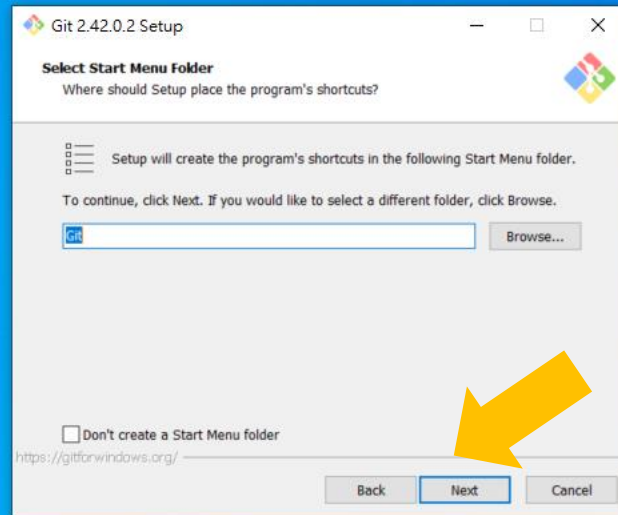
Click “Next”



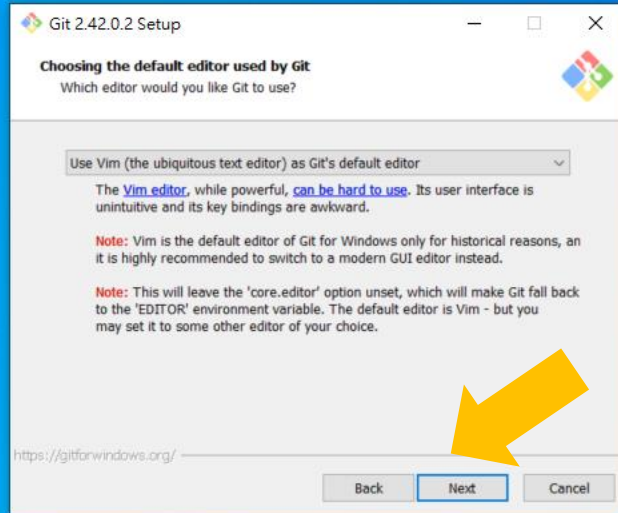
Click “Next”



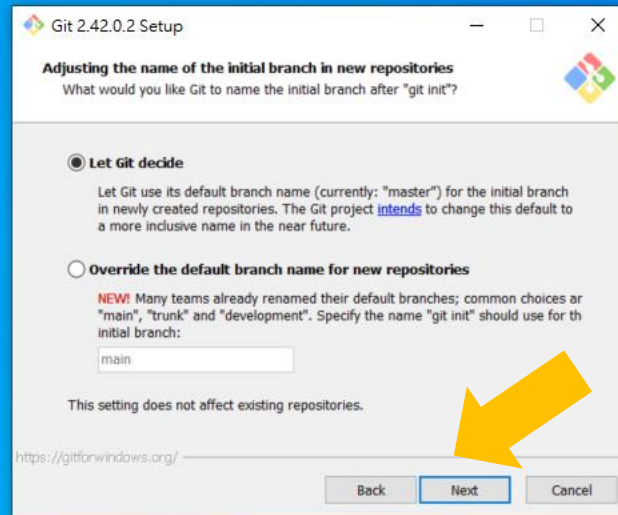
Click “Next”



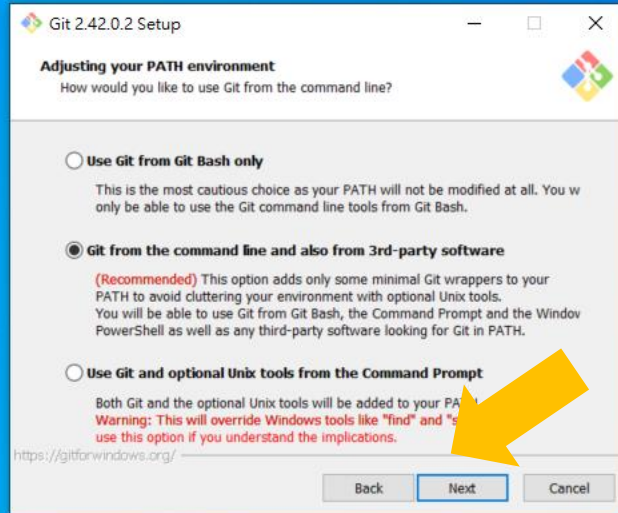
Click “Next”



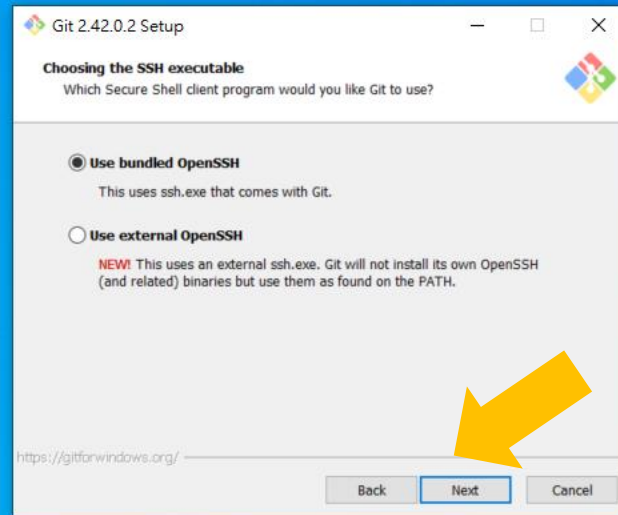
Click “Next”



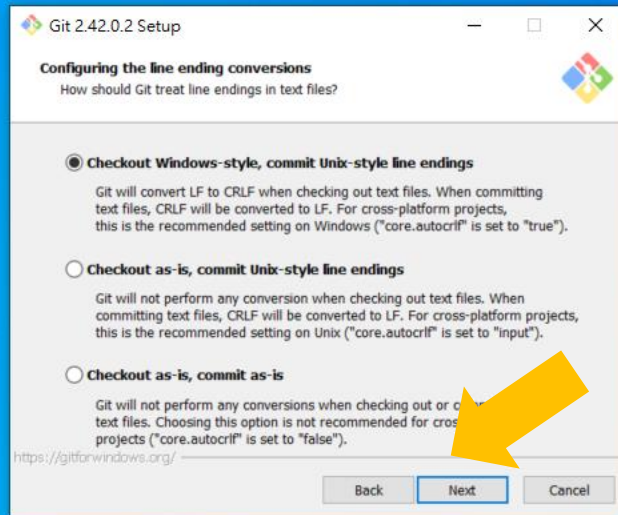
Click “Next”



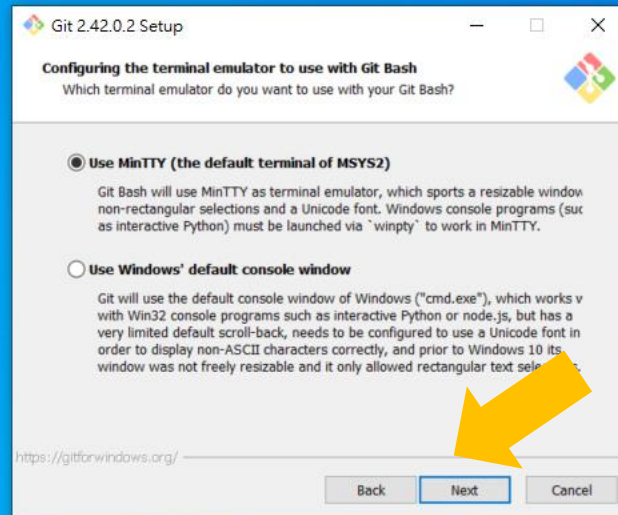
Click “Next”



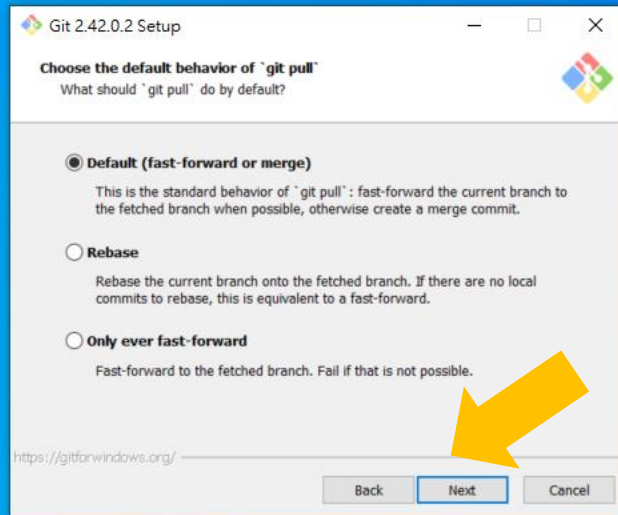
Click “Next”



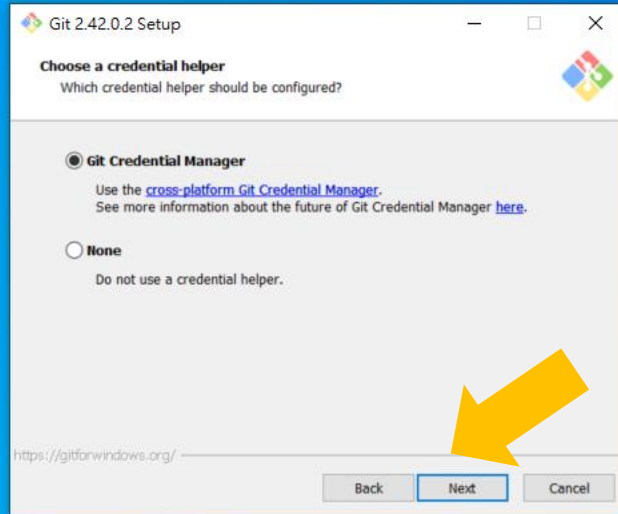
Click “Next”



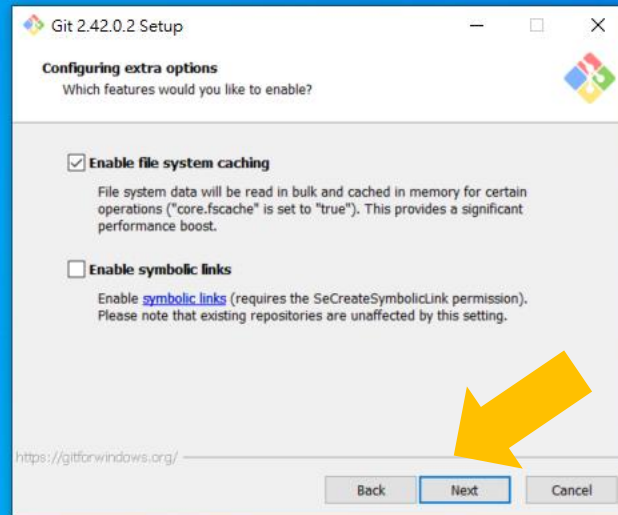
Click “Next”



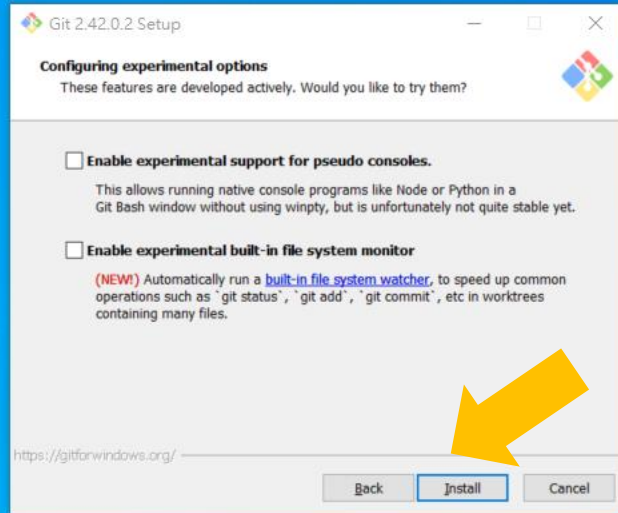
Click “Next”



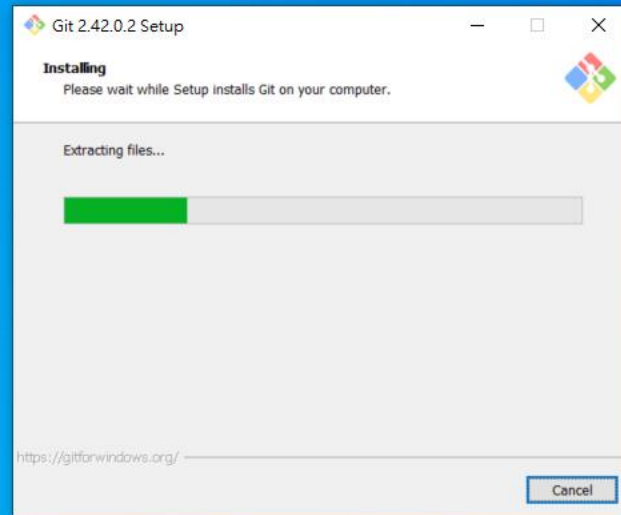
Click “Next”



Click “Install”

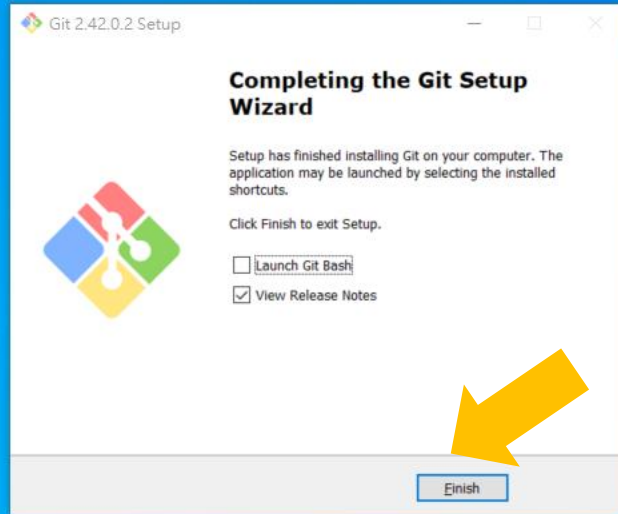


Installing Git

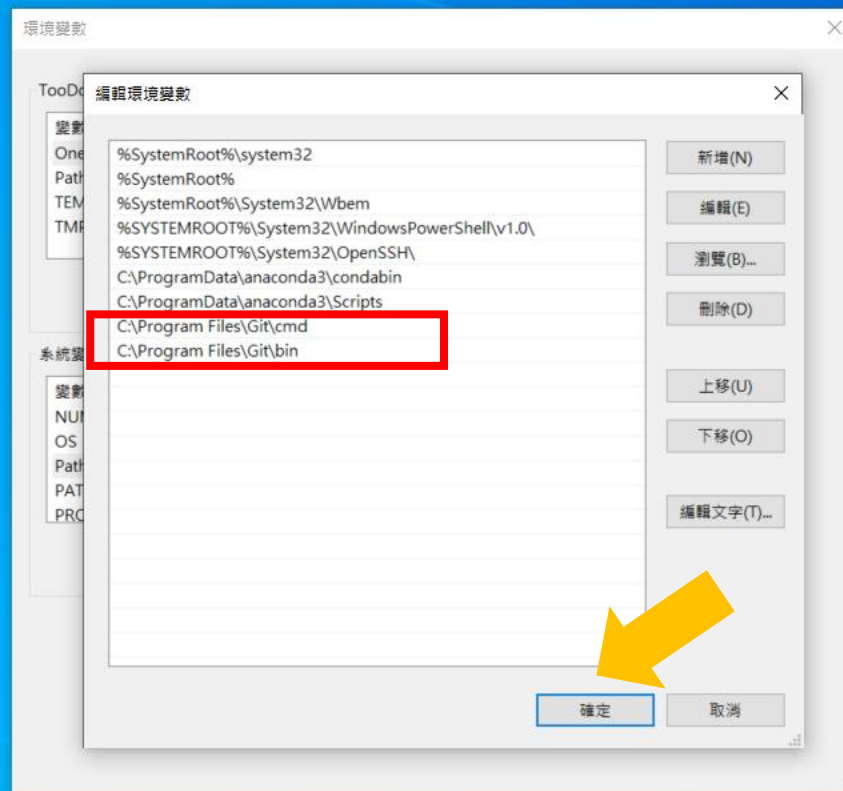


Chun-Hsiang Chan (2026)

Click “**Finish**”



Set “環境變數” (environmental variables)



This repository has been archived by the owner on Mar 10, 2023. It is now read-only.

CSSEGISandData / COVID-19 Public archive

https://github.com/CSSEGISandData/COVID-19 Download COVID-19 Data from JHU

Code Issues 1.7k Pull requests 285 Actions Projects Security Insights

master 1,603 branches 0 tags Go to file Code

CSSEGISandData Update README.md	4360e50 on Mar 10	7,691 commits
archived_data	archived_0325	3 years ago
csse_covid_19_data	Automated update	6 months ago
who_covid_19_situation_reports	update who readme	3 years ago
.gitignore	update	4 years ago
README.md	Update README.md	6 months ago

README.md

COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University

On March 10, 2023, the Johns Hopkins Coronavirus Resource Center ceased its collecting and reporting of global COVID-19 data. For updated cases, deaths, and vaccine data please visit the following sources:

- Global: [World Health Organization \(WHO\)](#)
- U.S.: [U.S. Centers for Disease Control and Prevention \(CDC\)](#)

For more information, visit the [Johns Hopkins Coronavirus Resource Center](#).

Chun-Hsiang Chan (2026)



Novel Coronavirus (COVID-19) Cases, provided by JHU CSSE

[systems.jhu.edu/research/public-health/...](#)

engineering johns-hopkins-university jhu
csse 2019-ncov coronavirus covid-19
systems-science

Readme Activity 29.2k stars 869 watching 18.7k forks Report repository

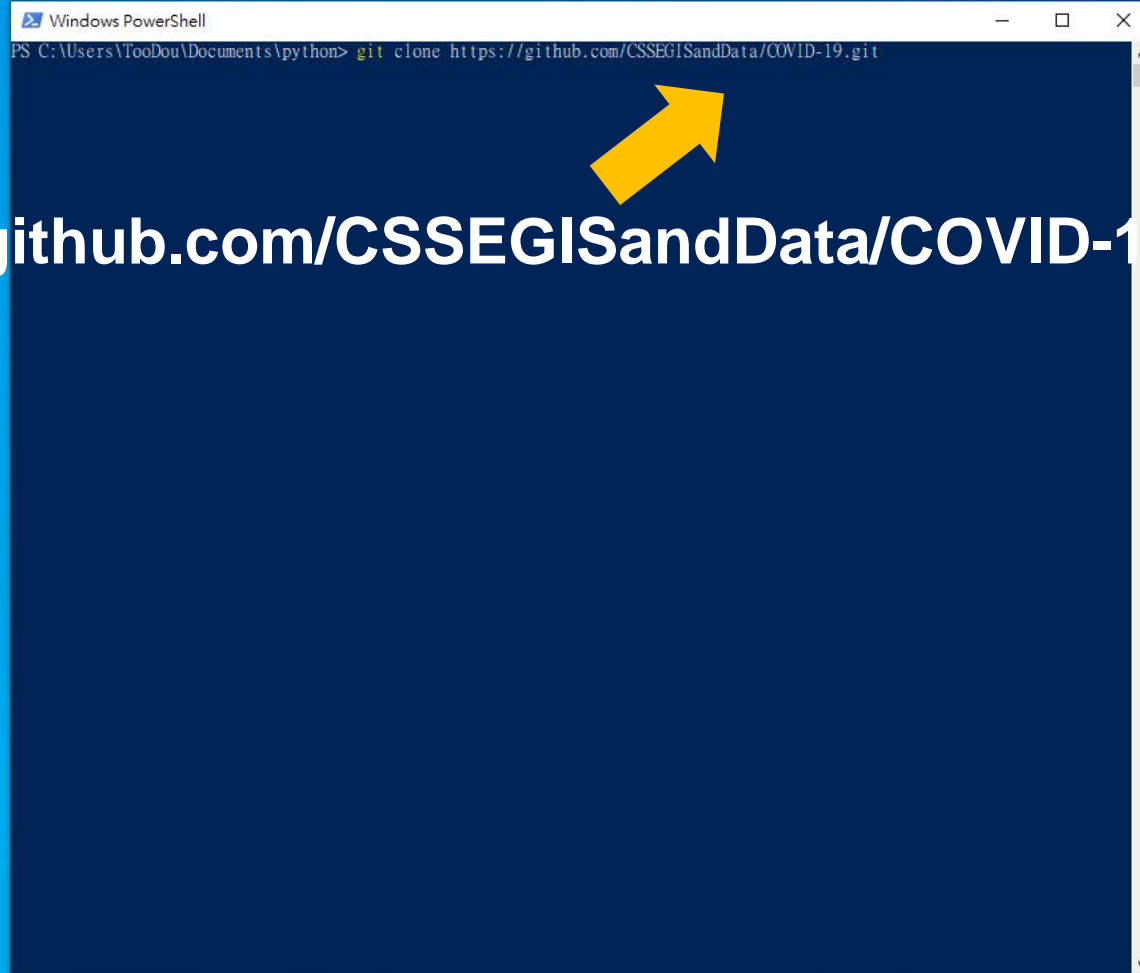
Releases No releases published

Packages No packages published

Used by 1

Open terminal...

git clone <https://github.com/CSSEGISandData/COVID-19.git>



```
Windows PowerShell
PS C:\Users\TooDou\Documents\python> git clone https://github.com/CSSEGISandData/COVID-19.git
Cloning into 'COVID-19'...
remote: Enumerating objects: 682302, done.
remote: Counting objects: 100% (2621/2621), done.
remote: Compressing objects: 100% (2030/2030), done.
Receiving objects: 0% (1/682302)
```



Downloading

The End

Thank you for your attention!

Email: chchan@ntnu.edu.tw

Website: <https://toodou.github.io/>

