



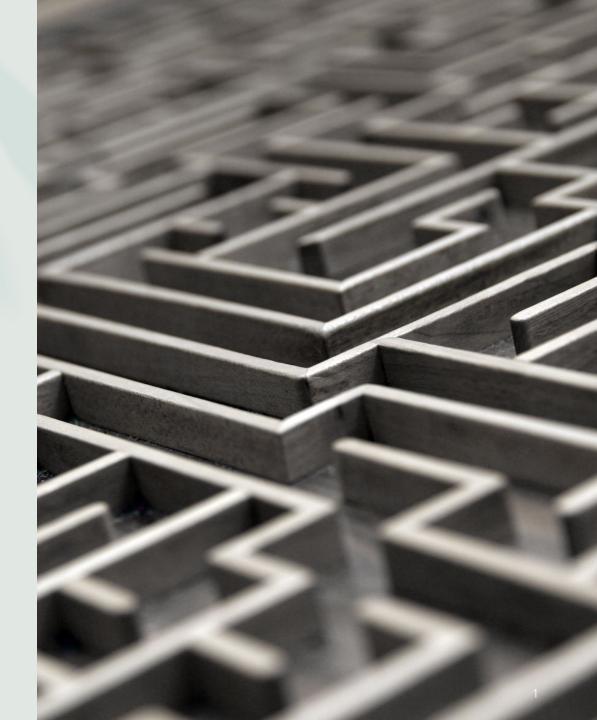
# Medical Geography Python Programming

**Chun-Hsiang Chan Ph.D.** 

Department of Geography, National Taiwan Normal University

# Outline

- COVID-19 Pandemic
- Python Installation
- Git Installation



## Discussion

- How can we leverage the geographic visualization approach to demonstrate the spatiotemporal characteristics of COVID-19 pandemic?
- Mapping?
- Descriptive statistics?
- Animation?
- Other approaches...

## Download Anaconda

- We will use ipython notebook through out the course.
- Here is the download link: <a href="https://www.anaconda.com/download">https://www.anaconda.com/download</a>
- If your computer has no sufficient space for install anaconda, you may consider the light version - miniconda, as follows,

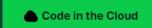
https://docs.conda.io/projects/miniconda/en/latest/miniconda-install.html

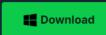
#### **Anaconda Distribution**

#### 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











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, Chun-Hsiang Chan (2023)



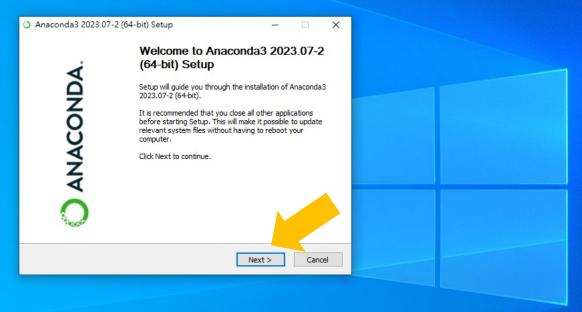
#### Trusted

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

Hey! Nelcome to Anaconda

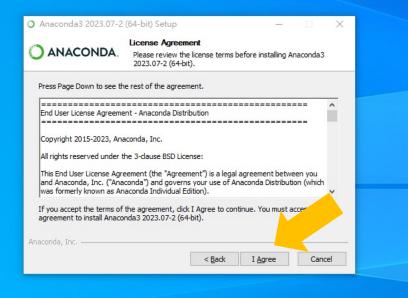
here to help. What are you look for today?

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





#### Click "I Agree"











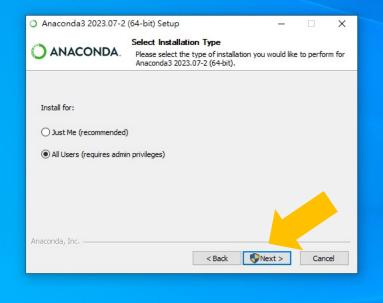






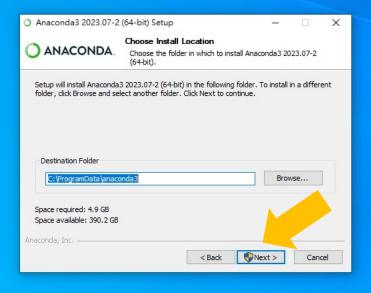








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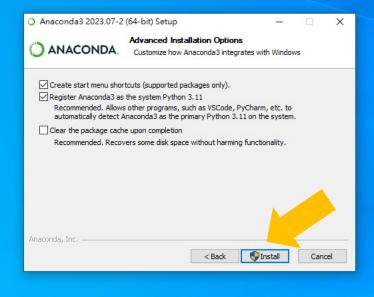








#### Click "Install"









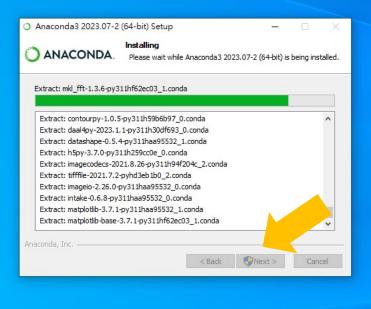


















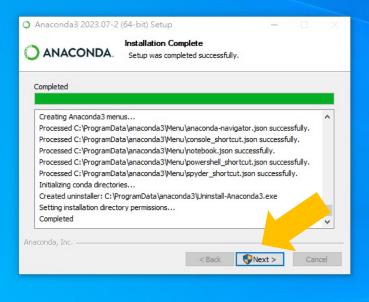
















































#### Click "Finish"

























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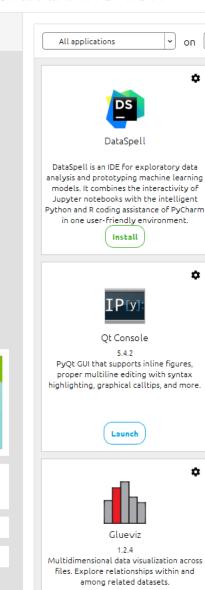


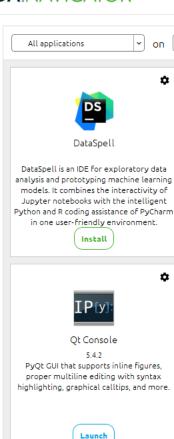


























Glueviz

among related datasets.









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base (root)



Anaconda Notebooks

Cloud-hosted notebook service from

Anaconda, Launch a preconfigured

environment with hundreds of packages

and store project files with persistent

cloud storage.

Launch

Scientific PYthon Development

EnviRonment. Powerful Python IDE with

advanced editing, interactive testing.

debugging and introspection features

Launch

Orange 3

Component based data mining framework. novice and expert. Interactive workflows



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Channels

Data visualization and data analysis for with a large toolbox.



powershell shortcut miniconda

0.0.1



CMD.exe Prompt

Run a cmd.exe terminal with your current

environment from Navigator activated

Launch

Datalore

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.

Launch



PyCharm Professional

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A full-fledged IDE by JetBrains for both Scientific and Web Python development. Supports HTML, JS, and SQL.



JupyterLab

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An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture.

Launch

IBM Watson Studio Cloud

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.

Launch



Notebook

Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.

Launch



Powershell Prompt

Run a Powershell terminal with your current environment from Navigator activated

Launch



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

Launch



console shortcut miniconda

Install



RStudio

A set of integrated tools designed to help you be more productive with R. Includes R



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essentials and notebooks.



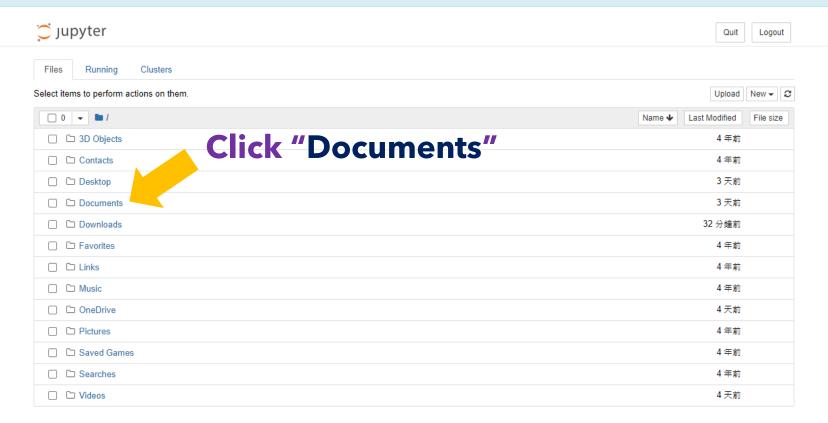


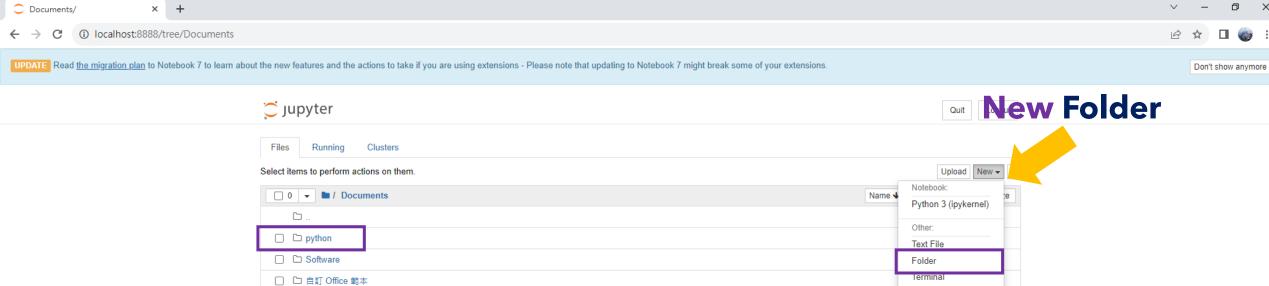




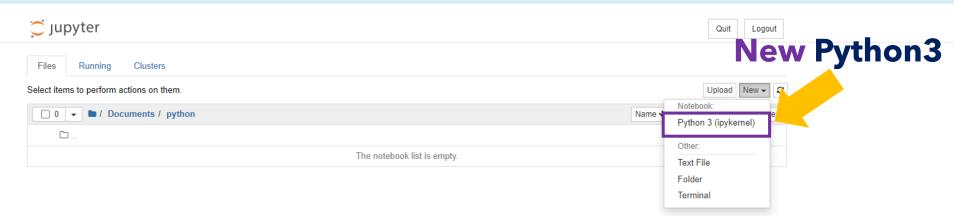


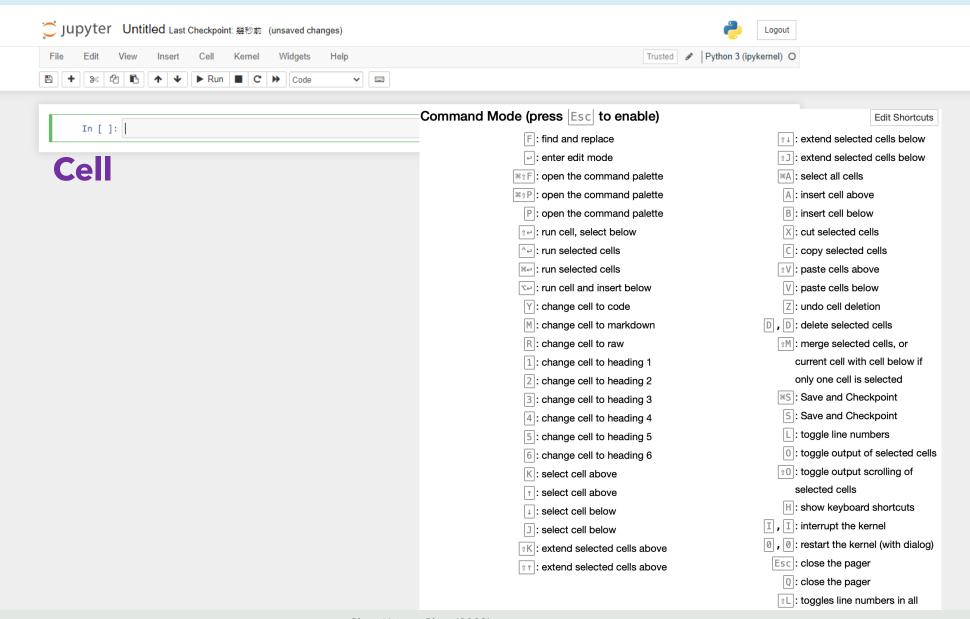
25 September 2023



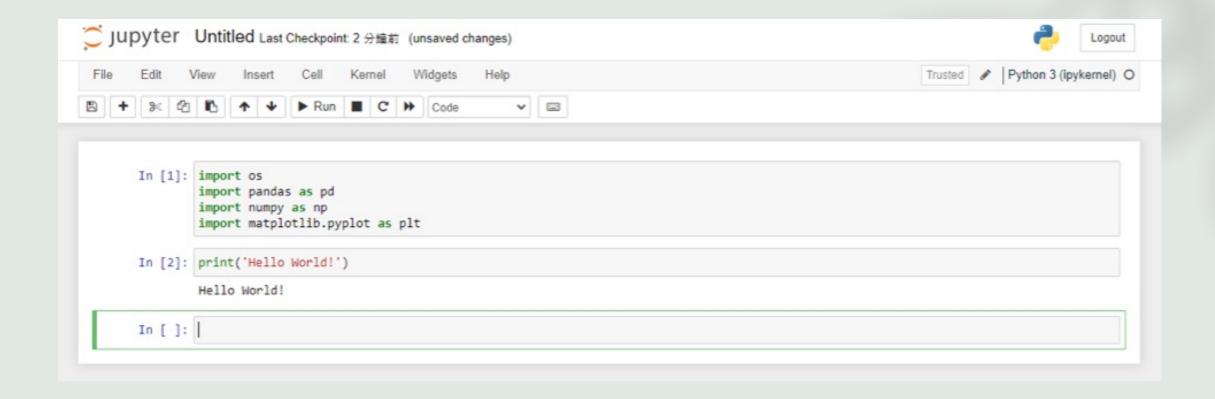


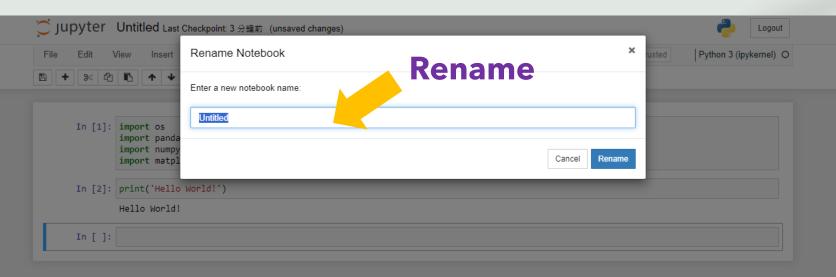
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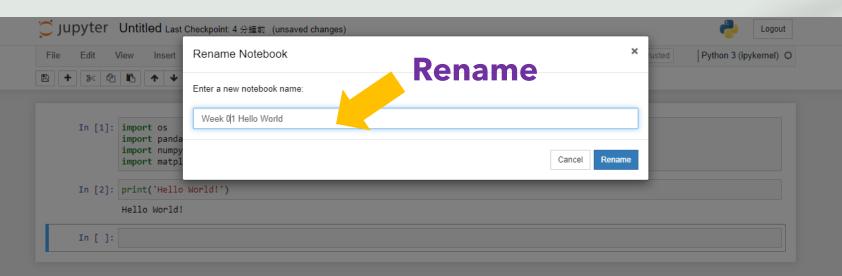


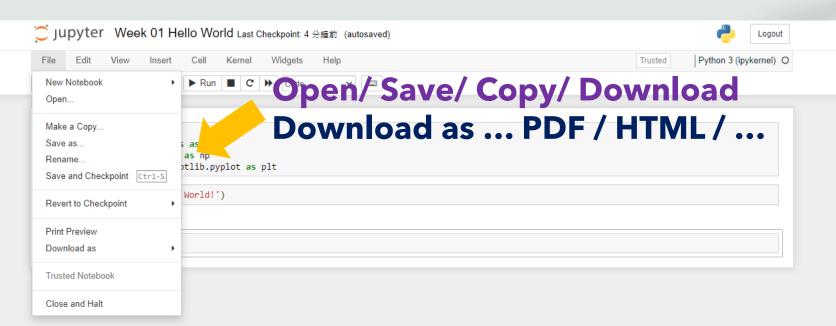


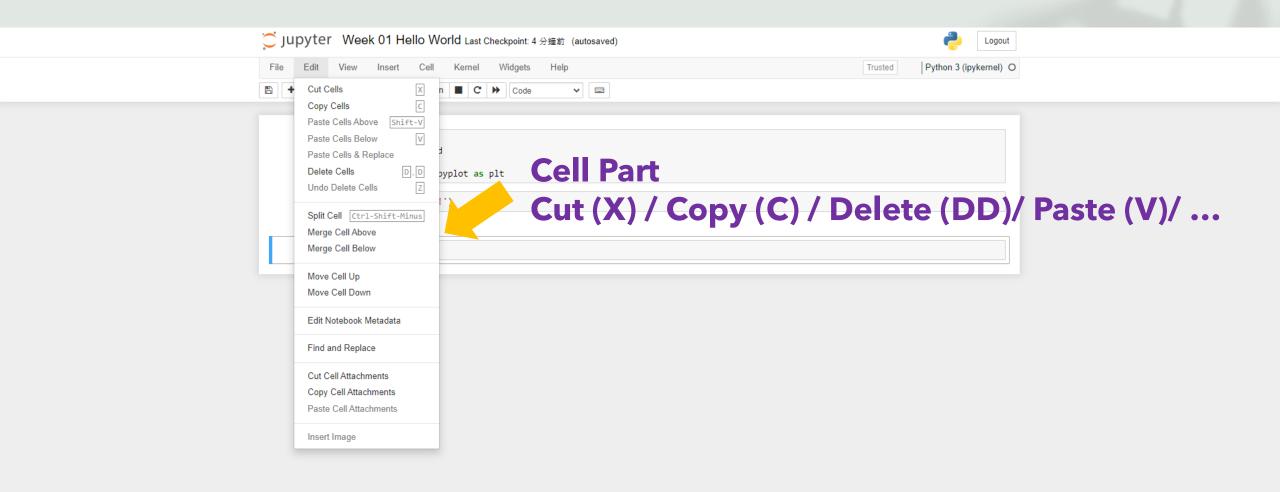
## Hello World

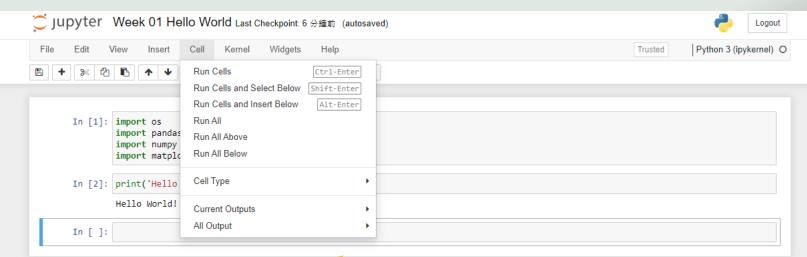






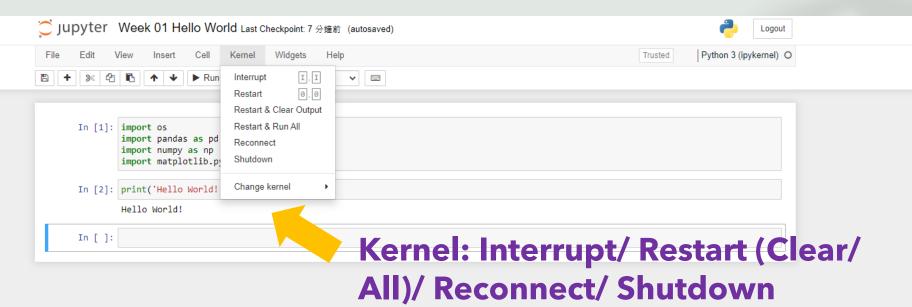


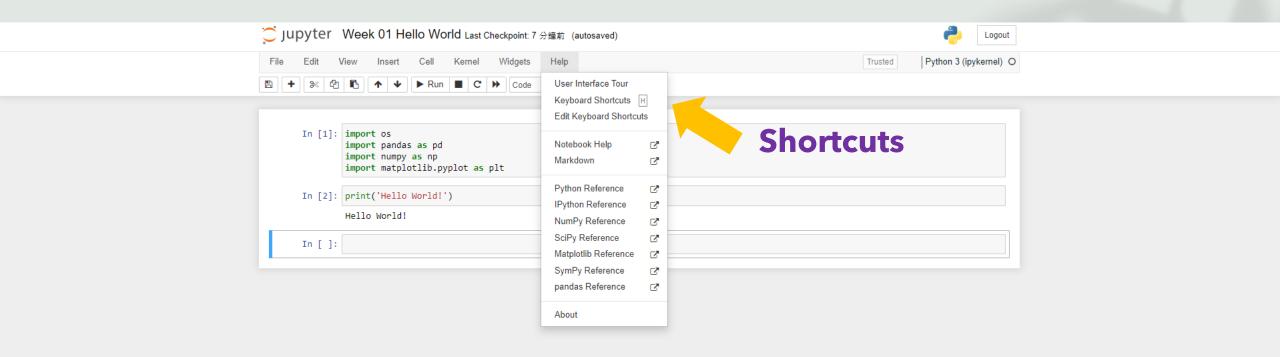


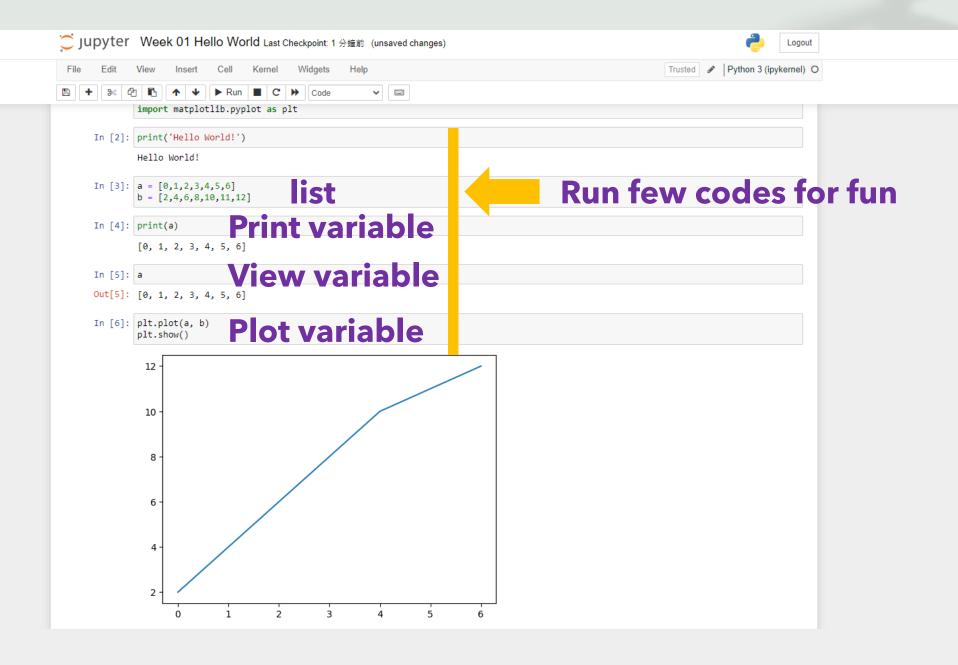




Run Cell/ Run All (Above/ Below)



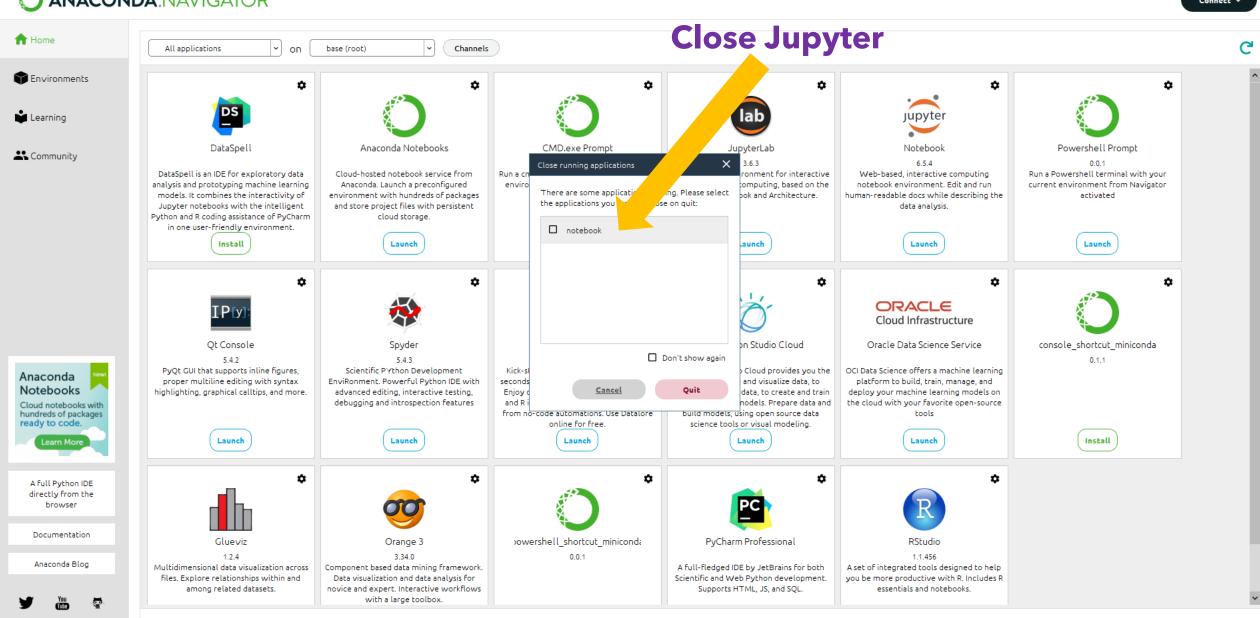




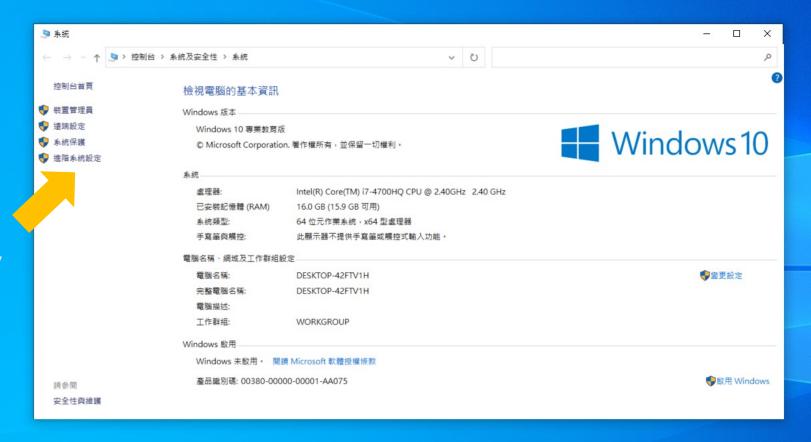
File Help

#### ANACONDA.NAVIGATOR





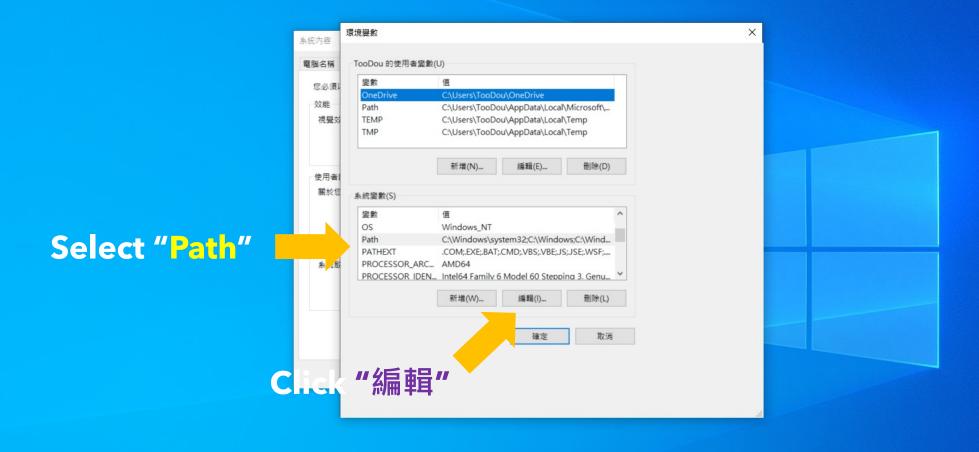
# The duration of opening anaconda for jupyter notebook is quite long. Here, we may open jupyter in terminal ... but for windows users ...



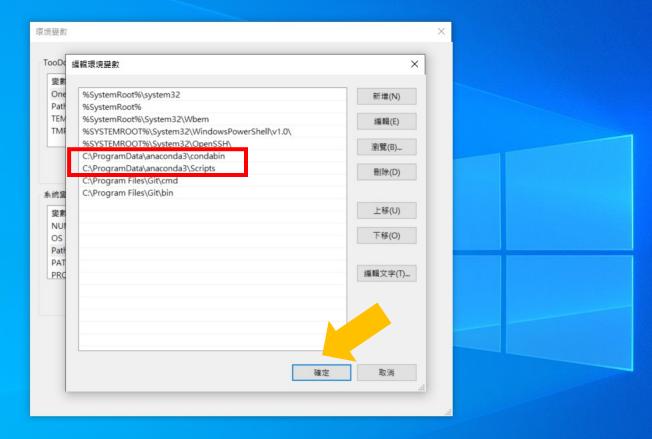
Set System Env



Click "環境變數"



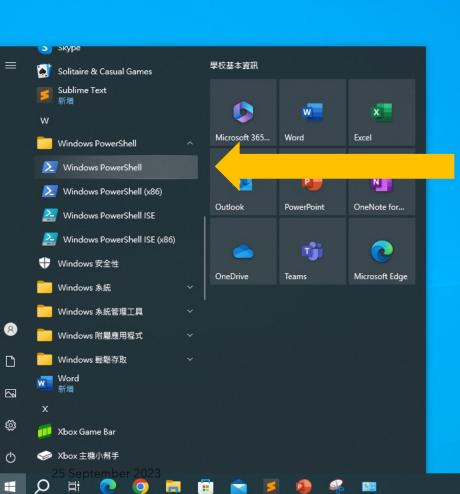
### Set "環境變數" (environmental variables)





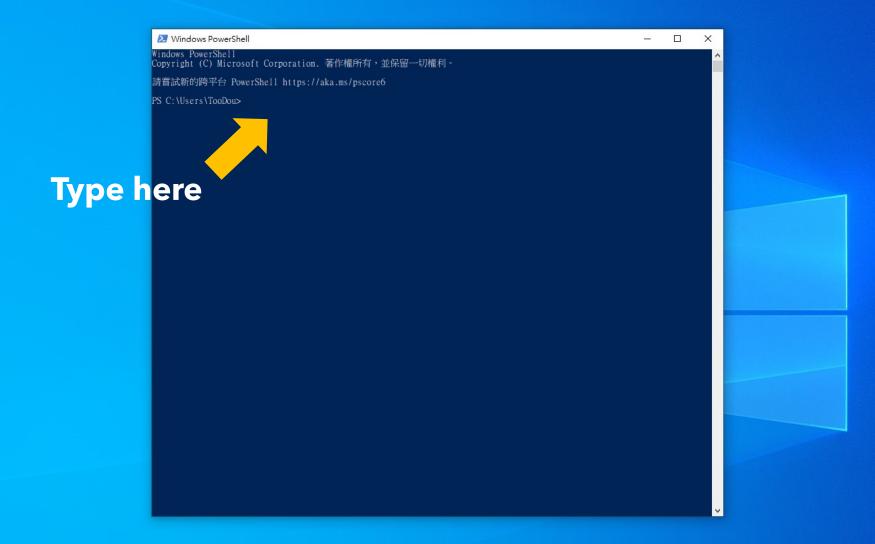


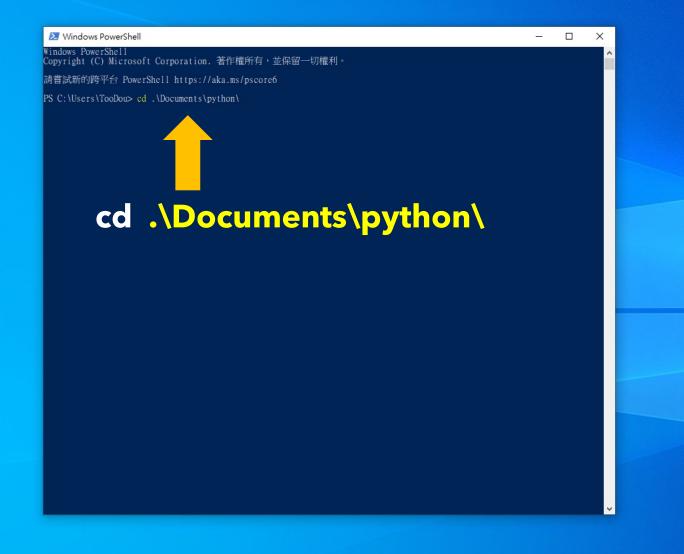
2023/9/10

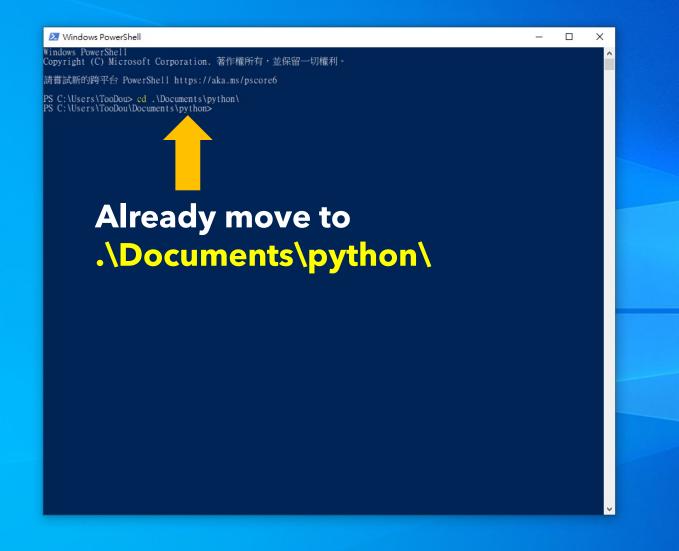


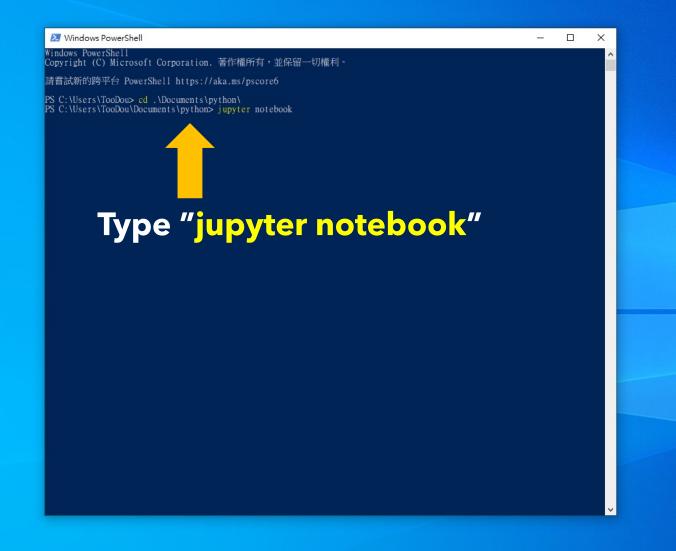


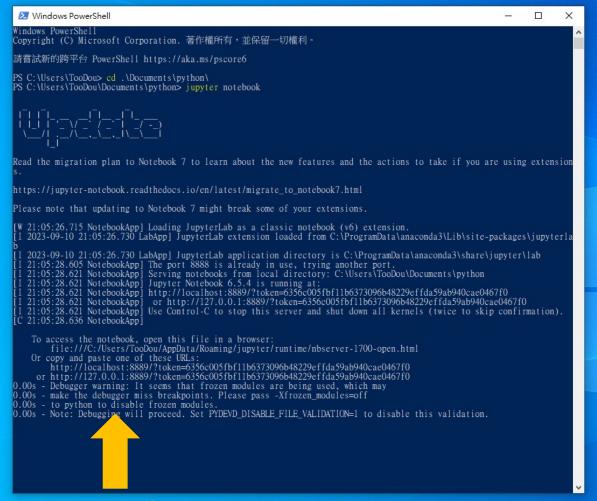
Chun-Hsiang Chan (2023)



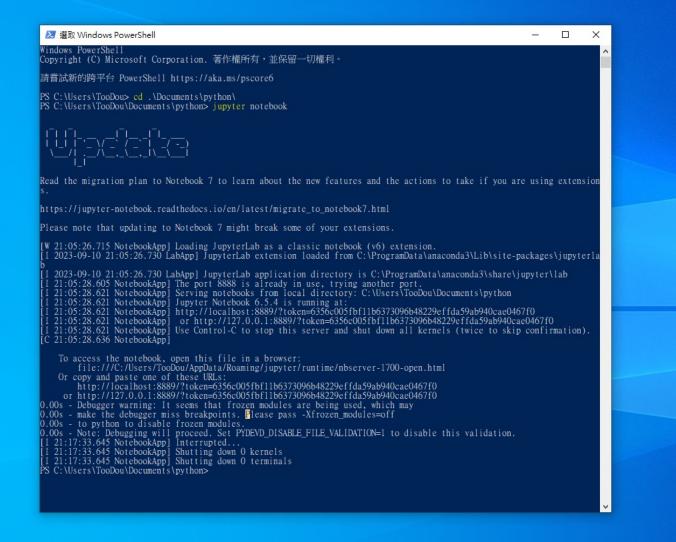






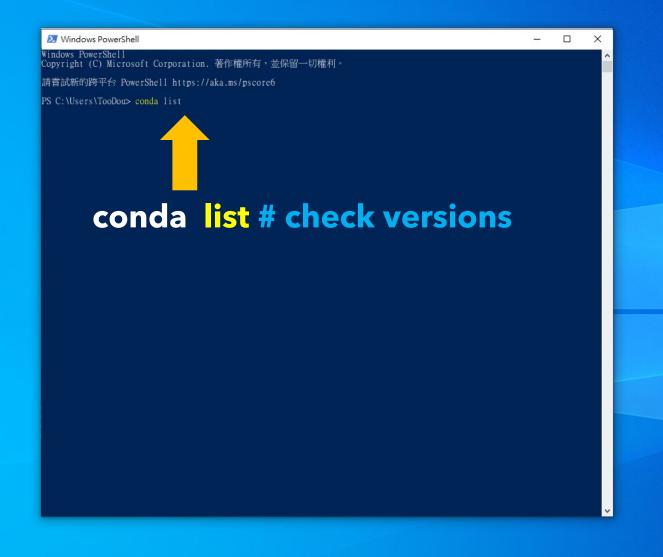


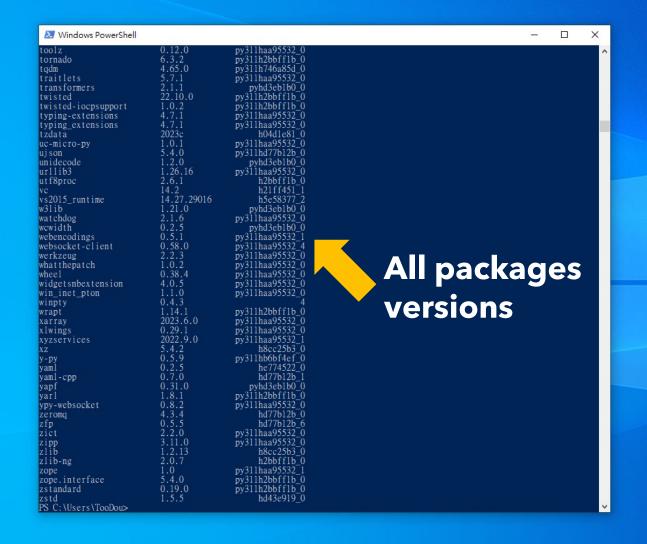
## **Successfully Open**

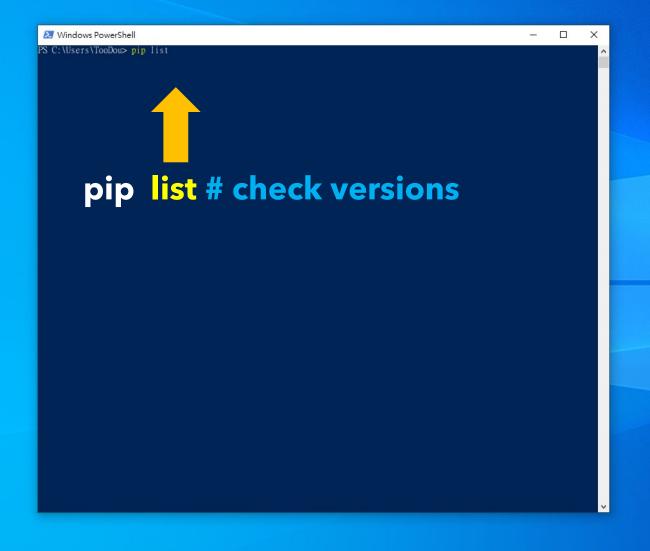


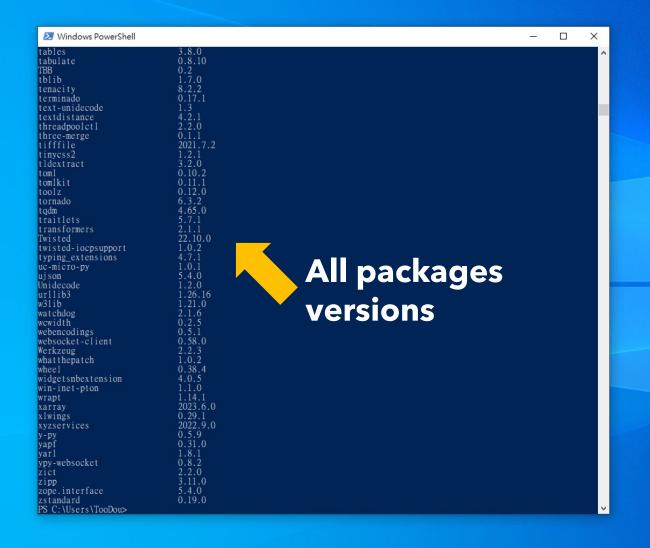
25 September 2023 Chun-Hsiang Chan (2023)

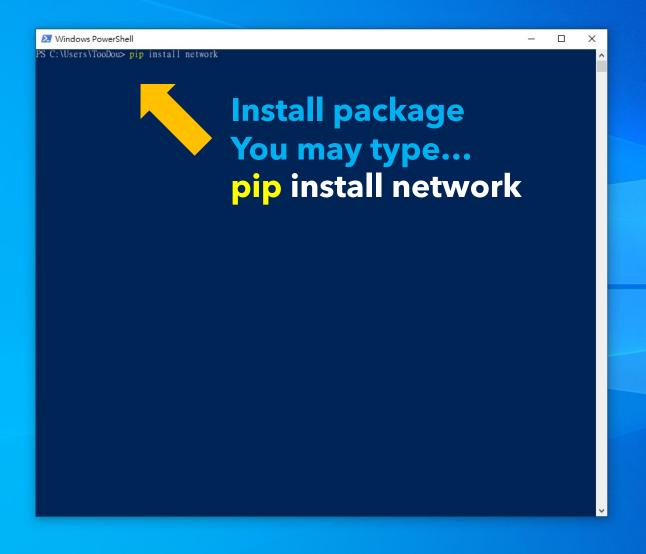
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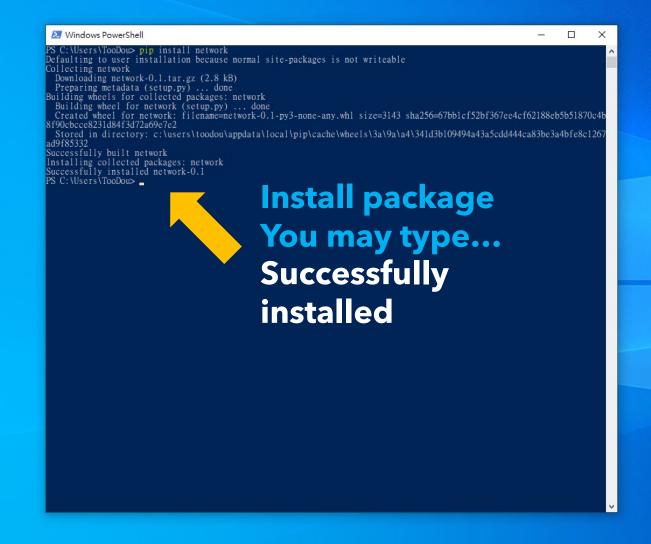


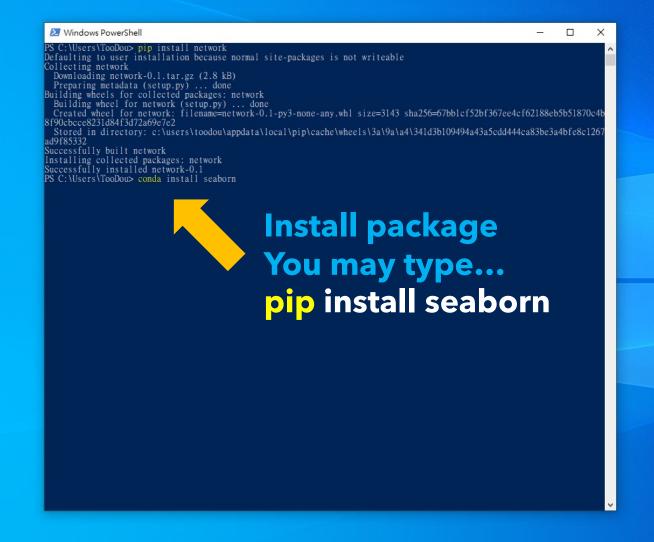


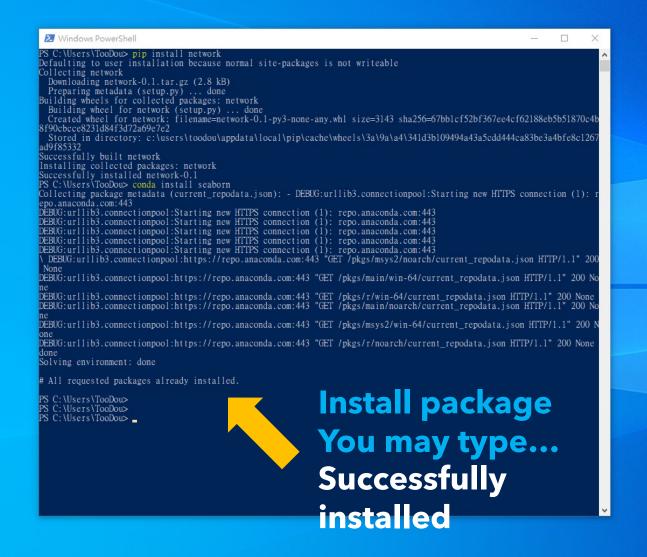














Q Search entire site...

#### About

#### Documentation

#### **Downloads**

GUI Clients Logos

#### Community

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.



#### **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.

will need this ...

View Logos →

#### Git via Git

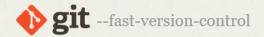
If you already have Git installed, you can get the latest development version via Git itself:

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

You can also always browse the current contents of the git repository using the web interface.

Git is a member of Software Freedom Conservancy

About this site
Patches, suggestions, and comments are welcome.



Q Search entire site...

#### About

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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

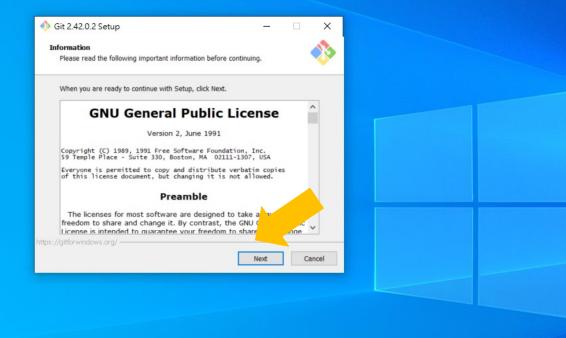
Several free and commercial GUI tools are available for the Windows platform.



#### Get Involved

A knowledgeable Git community is available to answer your questions.

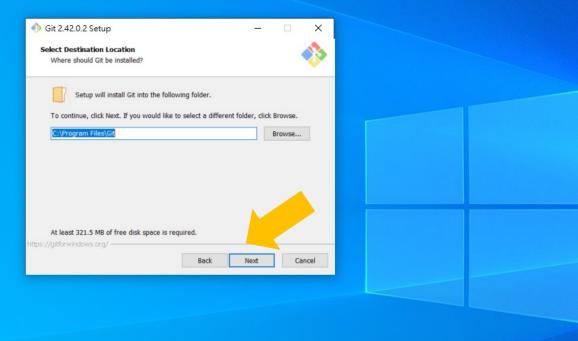
# Download here If your computer is windows ...





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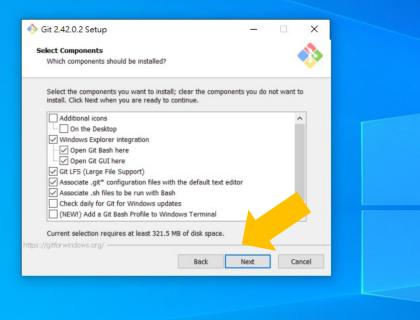


























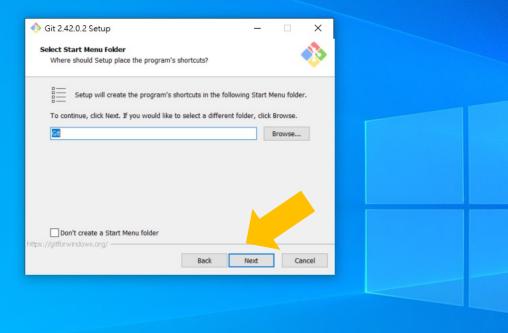
















































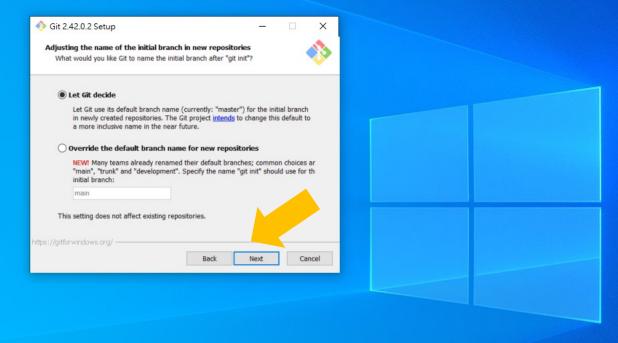






















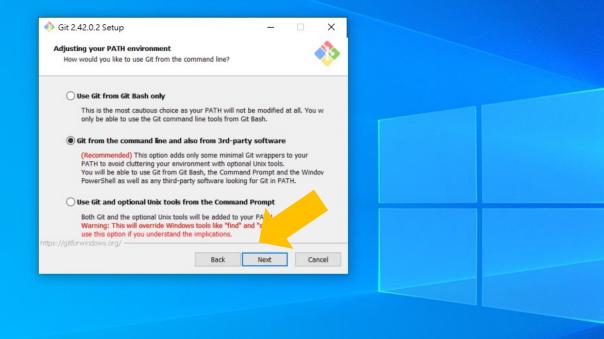








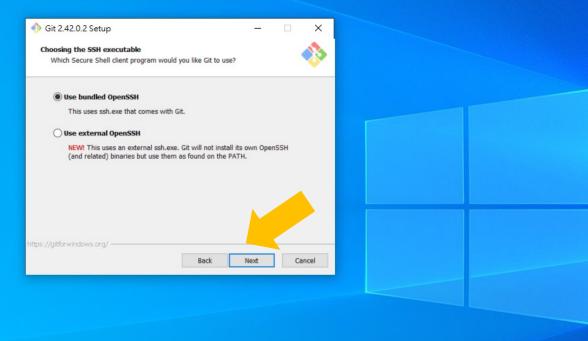




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25 September 2023 Chun-Hsiang Chan (2023)















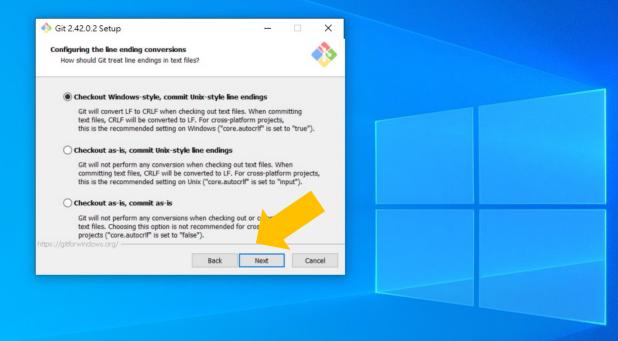






















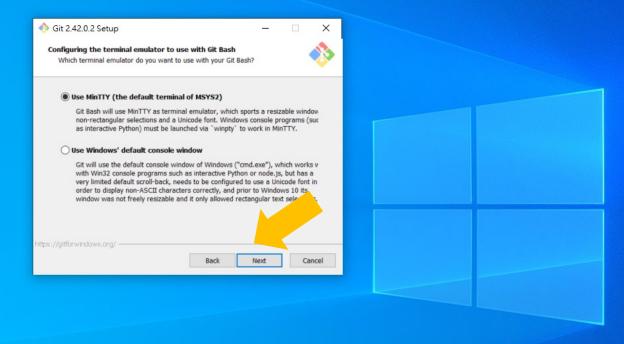


















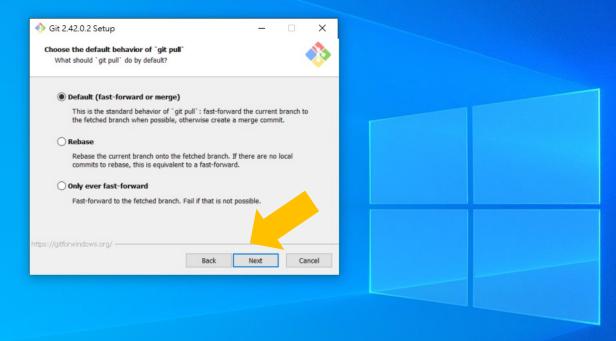






















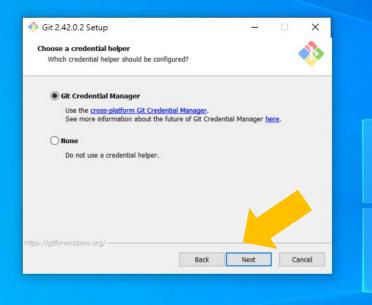


























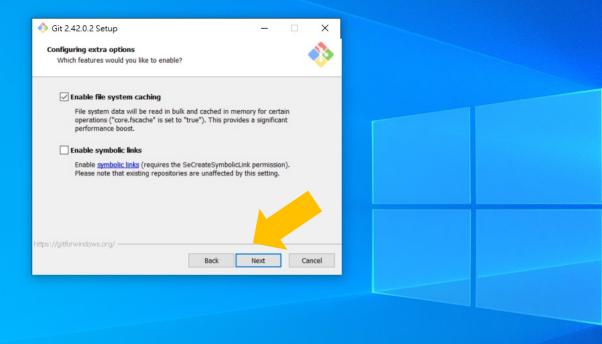










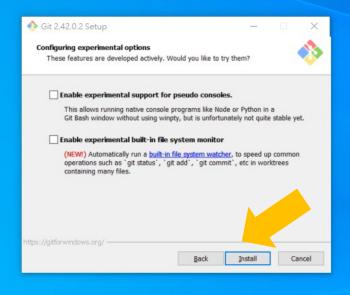








## Click "Install"













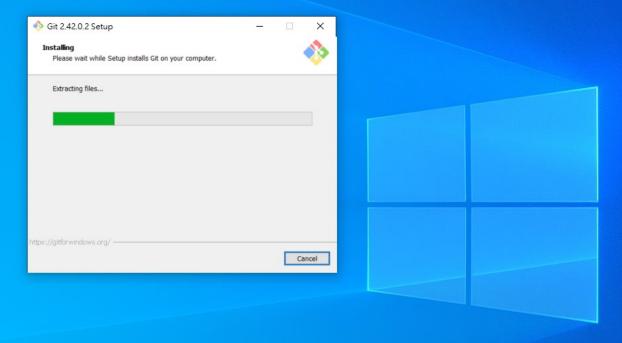








## **Installing Git**





















## Click "Finish"

















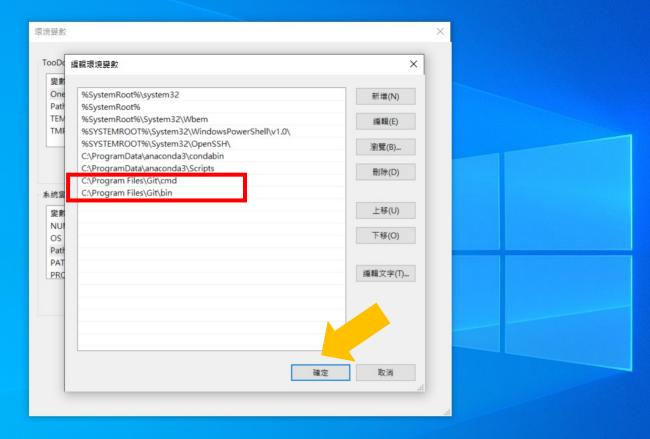




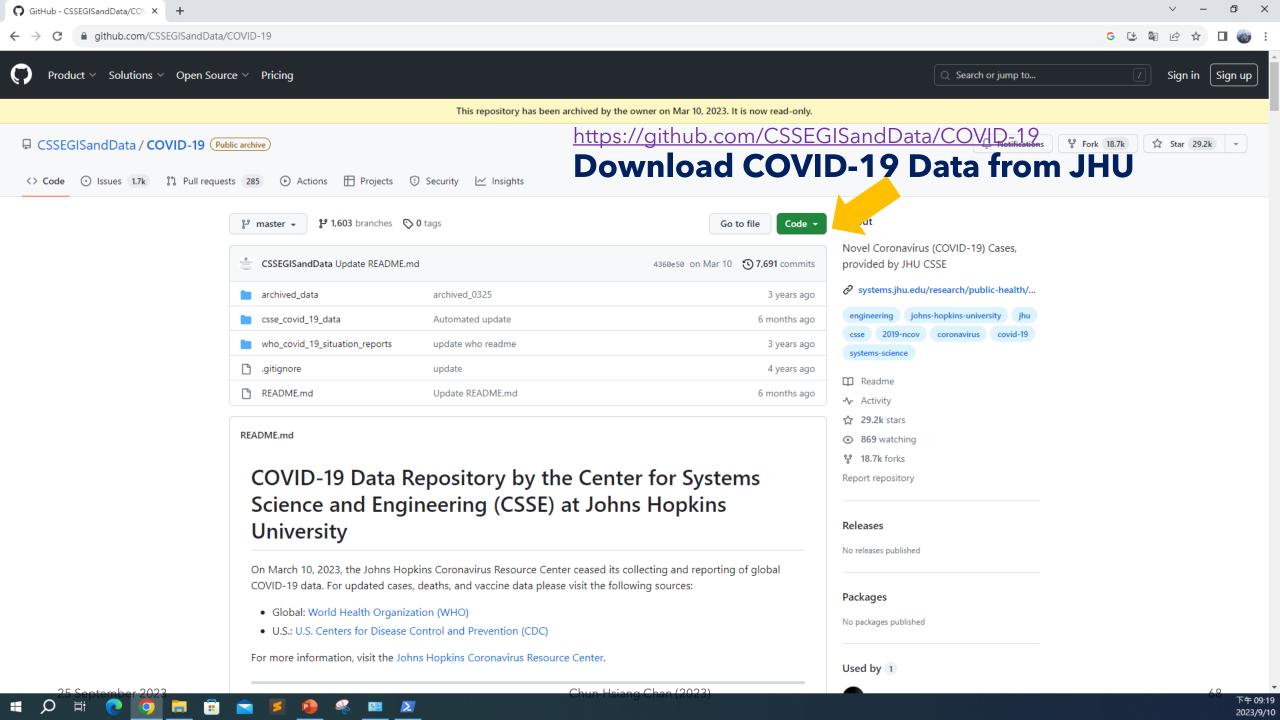


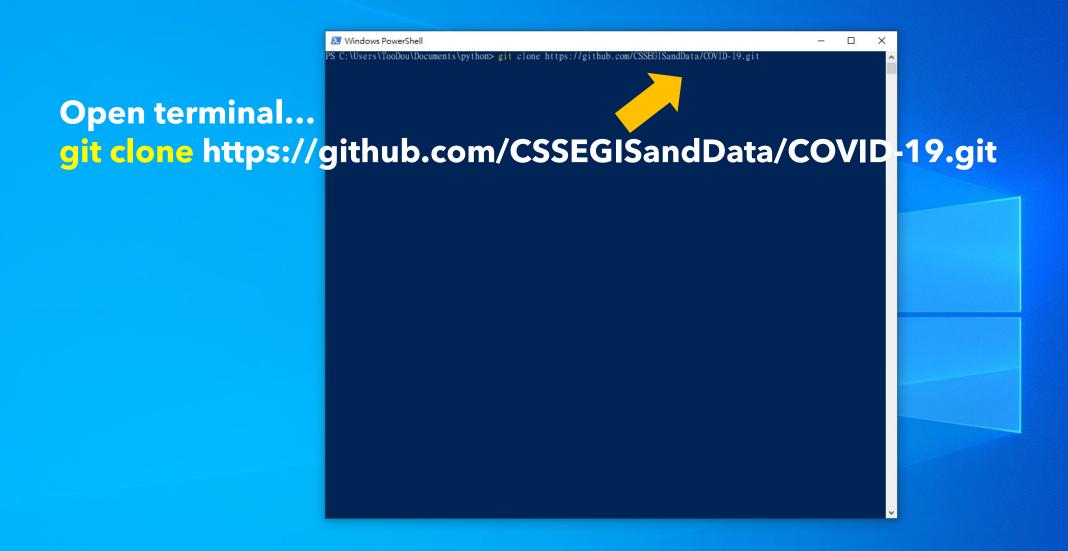


## Set "環境變數" (environmental variables)



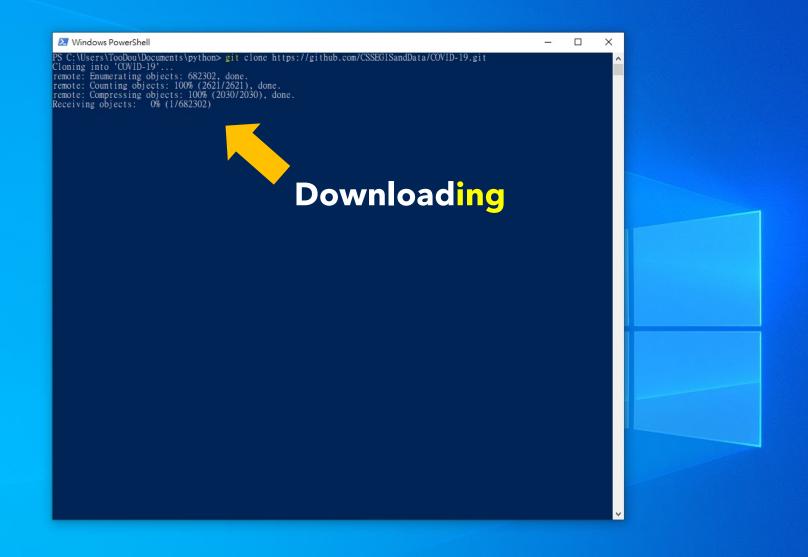
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## The End

## Thank you for your attention!

Email: chchan@ntnu.edu.tw

Web: toodou.github.io



