

# 安裝Python

曾喜仙 G06350028



# Agenda

- 安裝 python
- 利用 pip 安裝 python 套件
- 安裝 jupyter 並且開始使用 python
- 上傳範例 ipynb 檔

# 安裝 Python

- 安裝 Python 3.6
  - <https://www.python.org/downloads/>
- 選擇 windows executable installer
- 開啟 windows command line (cmd) 以確認安裝成功

Download Python | Python Software Foundation [US] | <https://www.python.org/downloads/>

Python Docs PyPI Jobs Community

1 輸入網址

python™

Menu Search A A Socialize

**Download the latest version for Windows**

Download Python 3.7.1

Looking for Python with a different OS? Python for [Windows](#), [Linux/UNIX](#), [Mac OS X](#), [Other](#)

Want to help test development versions of Python? [Pre-releases](#)

Looking for Python 2.7? See below for specific releases

Looking for a specific release?

Python releases by version number:

Release version	Release date		Click for more
<a href="#">Python 3.7.1</a>	2018-10-20	<a href="#">Download</a>	<a href="#">Release Notes</a>
<a href="#">Python 3.6.7</a>	2018-10-20	<a href="#">Download</a>	<a href="#">Release Notes</a>
<a href="#">Python 3.5.6</a>	2018-08-02	<a href="#">Download</a>	<a href="#">Release Notes</a>
<a href="#">Python 3.4.9</a>	2018-08-02	<a href="#">Download</a>	<a href="#">Release Notes</a>
<a href="#">Python 3.7.0</a>	2018-06-27	<a href="#">Download</a>	<a href="#">Release Notes</a>

2 前往下載

機率統計

下午 01:08 2018/12/19

Python Release Python x GitHub - Akuli/python- x

Python Software Foundation [US] | https://www.python.org/downloads/release/python-367/

SSL/TLS certificate validation and the Install Certificates.command.

[Full Changelog](#)

## Files

Version	Operating System	Description	MD5 Sum	File Size	GPG
<a href="#">Gzipped source tarball</a>	Source release		c83551d83bf015134b4b2249213f3f85	22969142	<a href="#">SIG</a>
<a href="#">XZ compressed source tarball</a>	Source release		bb1e10f5cedf21fcf52d2c7e5b963c96	17178476	<a href="#">SIG</a>
<a href="#">macOS 64-bit/32-bit installer</a>	Mac OS X	for Mac OS X 10.6 and later	68885dffcd1d13c5d24699daa0b83315f	28155195	<a href="#">SIG</a>
<a href="#">macOS 64-bit installer</a>	Mac OS X	for OS X 10.9 and later	fee934e3251999a1d353e47ce77be84a	27045163	<a href="#">SIG</a>
<a href="#">Windows x86-64 embeddable zip file</a>	Windows	for AMD64/EM64T/x64	a7caea654e2818a86ceb017b33b3bf53	8173765	<a href="#">SIG</a>
<a href="#">Windows x86-64 executable installer</a>	Windows	for AMD64/EM64T/x64	7617e04b9dafc564f680e37c2f2398b8	7188094	<a href="#">SIG</a>
<a href="#">Windows x86-64 web-based installer</a>	Windows	for AMD64/EM64T/x64	38cc47776173a45ffec675fc129a46c5	32009096	<a href="#">SIG</a>
<a href="#">Windows x86 embeddable zip file</a>	Windows		6f6b84a5f3c32edd43bffc7c0d65221b	1320008	<a href="#">SIG</a>
<a href="#">Windows x86 executable installer</a>	Windows		a993744c9daa6d159712c8a35374ca9c	6403839	<a href="#">SIG</a>
<a href="#">Windows x86 web-based installer</a>	Windows		354023f36de665554bafa21ab10eb27b	30963032	<a href="#">SIG</a>
<a href="#">Windows x86 embeddable zip file</a>	Windows		da81cf570ee74b59d36f2bb555701cfd	1293456	<a href="#">SIG</a>

3 下載 windows x86-64 executable installer

About Downloads Documentation Community Success Stories News

Applications All releases Docs Community Survey Arts Python News

Quotes Source code Audio/Visual Talks Diversity Business Community News

Windows taskbar icons: File Explorer, Mail, Chrome, PowerPoint, etc.

System tray: Network, Volume, Date/Time (2018/12/19 下午 01:11)

# Install Python 3.6.7 (64-bit)

Select **Install Now** to install Python with default settings, or choose **Customize** to enable or disable features.



**Install Now**

C:\Users\admin\AppData\Local\Programs\Python\Python36

Includes IDLE, pip and documentation  
Creates shortcuts and file associations

5

安裝

→ **Customize installation**  
Choose location and features

☒ Install launcher for all users (recommended)

☒ Add Python 3.6 to PATH

4

加入 Windows path 中

Cancel

python  
for  
windows



python  
for  
windows

# Setup was successful

Special thanks to Mark Hammond, without whose years of freely shared Windows expertise, Python for Windows would still be Python for DOS.

New to Python? Start with the [online tutorial](#) and [documentation](#).

See [what's new](#) in this release.



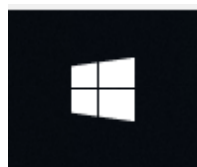
## Disable path length limit

Changes your machine configuration to allow programs, including Python, to bypass the 260 character "MAX\_PATH" limitation.

6 取消 Path 長度限制

Close

7 按下 WinKey + R





```
C:\WINDOWS\system32\cmd.exe - python

C:\Users\admin>python
Python 3.6.7 (v3.6.7:0ec5cf24b7, Oct 20 2018, 13:35:33) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> _
```

若有出現上面的文字就正確了!

# 利用 pip 安裝 python 套件

- 關閉上一步的畫面，並再開一次 cmd
- 確認 pip 版本，並升級
- 利用 pip 安裝 套件
  - `pip install <套件1> <套件2> ...`
- 常用套件
  - numpy – 矩陣運算
  - opencv-python – 影像處理
  - matplotlib – 資料視覺化
  - scikit-learn – 科學運算

C:\Users\admin>pip list 1 輸入 pip list

Package	Version
---------	---------

-----

pip	10.0.1
-----	--------

setuptools	39.0.1
------------	--------

You are using pip version 10.0.1, however version 18.1 is available.

You should consider upgrading via the 'python -m pip install --upgrade pip' command.

C:\Users\admin>\_

資訊顯示需要更新

C:\Users\admin>python -m pip install --upgrade pip

Collecting pip **2 輸入 python -m pip install --upgrade pip**

Downloading <https://files.pythonhosted.org/packages/c2/d7/90f34cb0d83a6c5631cf71dfe64cc1054598c843a92b400e55675cc2ac37/pip-18.1-py2.py3-none-any.whl> (1.3MB)

63%		839kB	6.6MB/s	eta 0:00:01
64%		849kB	6.6MB/s	eta 0:00:01
64%		860kB	6.6MB/s	eta 0:00:01
65%		870kB	6.6MB/s	eta 0:00:01
66%		880kB	6.6MB/s	eta 0:00:00
67%		890kB	6.6MB/s	eta 0:00:00
68%		901kB	936kB/s	eta 0:00:00
68%		911kB	936kB/s	eta 0:00:00
69%		921kB	936kB/s	eta 0:00:00
70%		931kB	1.1MB/s	eta 0:00:00
71%		942kB	1.1MB/s	eta 0:00:00
71%		952kB	1.1MB/s	eta 0:00:00
72%		962kB	936kB/s	eta 0:00:00
73%		972kB	936kB/s	eta 0:00:00
74%		983kB	936kB/s	eta 0:00:00
75%		993kB	936kB/s	eta 0:00:00
75%		1.0MB	6.6MB/s	eta 0:00:00
76%		1.0MB	3.3MB/s	eta 0:00:00
77%		1.0MB	3.3MB/s	eta 0:00:00
78%		1.0MB	2.2MB/s	eta 0:00:00
78%		1.0MB	2.2MB/s	eta 0:00:00
79%		1.1MB	2.2MB/s	eta 0:00:00
80%		1.1MB	3.3MB/s	eta 0:00:00

```
C:\WINDOWS\system32\cmd.exe - pip install numpy opencv-python matplotlib scikit-learn
```

```
C:\Users\admin\Desktop>pip install numpy opencv-python matplotlib scikit-learn
```

```
Col 3 輸入 pip install numpy opencv-python matplotlib scikit-learn
Using cached https://files.pythonhosted.org/packages/51/70/7096a735527359dbc0c380b23b9c9bd05f...
```

```
Using cached https://files.pythonhosted.org/packages/51/70/7096a735b27359dbc0c380b23b9c9bd05fea62233f95849c43a6b02c5f40/numpy-1.15.4-cp36-none-win_amd64.whl
```

## Collecting opencv-python

Downloading [https://files.pythonhosted.org/packages/39/7e/5578b4f6f7d5b7b8387d4d3de4fd414d75cf45701a5ab7a23e656e865417/opencv\\_python-3.4.5.20-cp36-cp36m-win\\_amd64.whl](https://files.pythonhosted.org/packages/39/7e/5578b4f6f7d5b7b8387d4d3de4fd414d75cf45701a5ab7a23e656e865417/opencv_python-3.4.5.20-cp36-cp36m-win_amd64.whl) (38.3MB)

94%				36.3MB	2.0MB/s	eta	0:00:01
94%				36.3MB	1.9MB/s	eta	0:00:02
94%				36.3MB	1.9MB/s	eta	0:00:02
94%				36.3MB	2.0MB/s	eta	0:00:01
94%				36.3MB	1.9MB/s	eta	0:00:02
94%				36.4MB	1.8MB/s	eta	0:00:02
94%				36.4MB	2.1MB/s	eta	0:00:01
94%				36.4MB	2.5MB/s	eta	0:00:01
95%				36.4MB	2.3MB/s	eta	0:00:01
95%				36.4MB	2.0MB/s	eta	0:00:01
95%				36.4MB	2.0MB/s	eta	0:00:01
95%				36.4MB	2.0MB/s	eta	0:00:01
95%				36.4MB	1.8MB/s	eta	0:00:02
95%				36.4MB	2.0MB/s	eta	0:00:01
95%				36.4MB	2.1MB/s	eta	0:00:01
95%				36.5MB	2.2MB/s	eta	0:00:01
95%				36.5MB	1.9MB/s	eta	0:00:01
95%				36.5MB	1.7MB/s	eta	0:00:02
95%				36.5MB	1.8MB/s	eta	0:00:01
95%				36.5MB	2.0MB/s	eta	0:00:01

# 安裝 jupyter 以及使用 python

- Jupyter 是一個讓我們在網頁上寫 Python 的工具
- 利用 pip 安裝 jupyter
  - `pip install jupyter`

## 1 輸入 pip install jupyter

# Collecting jupyter

Downloading <https://files.pythonhosted.org/packages/83/df/0f5dd132200728a86190397e1ea87cd76244e42d39ec5e88efd25b2abd7e/jupyter-1.0.0-py2.py3-none-any.whl>

## Collecting jupyter-console (from jupyter)

Downloading [https://files.pythonhosted.org/packages/cb/ee/6374ae8c21b7d0847f9c3722dcdfac986b8e54fa9ad9ea66e1eb6320d2b8/jupyter\\_console-6.0.0-py2.py3-none-any.whl](https://files.pythonhosted.org/packages/cb/ee/6374ae8c21b7d0847f9c3722dcdfac986b8e54fa9ad9ea66e1eb6320d2b8/jupyter_console-6.0.0-py2.py3-none-any.whl)

## Collecting ipywidgets (from jupyter)

Downloading <https://files.pythonhosted.org/packages/30/9a/a008c7b1183fac9e52066d80a379b3c64eab535bd9d86cdc29a0b766fd82/ipywidgets-7.4.2-py2.py3-none-any.whl> (111kB)

```
73% | ██████████          | 81kB 1.3MB/s eta 0:00:  
82% | ███████████         | 92kB 1.5MB/s eta 0:  
91% | █████████████        | 102kB 936kB/s et  
100% | █████████████████     | 112kB 729kB/s
```

## Collecting qtconsole (from jupyter)

Downloading <https://files.pythonhosted.org/packages/e0/7a/8aefbc0ed078dec7951ac9a06dcd1869243ecd7bcbce26fa47bf5e469a8f/qtconsole-4.4.3-py2.py3-none-any.whl> (113kB)

```
72% | ██████████                               | 81kB 1.3MB/s eta 0:00:0
81% | ████████████                             | 92kB 1.2MB/s eta 0:0
90% | ██████████████                           | 102kB 1.3MB/s eta 
99% | ████████████████                         | 112kB 1.6MB/s    
100% | ████████████████████                     | 122kB 1.3MB/s
```

## Collecting ipykernel (from jupyter)

Downloading <https://files.pythonhosted.org/packages/d8/b0/f0be5c5ab335196f5cce96e5b889a>

**2 輸入 jupyter notebook**

```
C:\Users\admin>jupyter notebook
[I 14:32:03.125 NotebookApp] Writing notebook server cookie secret to C:\Users\admin\AppData\Roaming\jupyter\runtime\notebook_cookie_secret
[I 14:32:03.719 NotebookApp] Serving notebooks from local directory: C:\Users\admin
[I 14:32:03.719 NotebookApp] The Jupyter Notebook is running at:
[I 14:32:03.719 NotebookApp] http://localhost:8888/?token=b1fdf255d36d53351dd22012287625dc0cb42e351d7b0fea
[I 14:32:03.719 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 14:32:03.735 NotebookApp]
```

To access the notebook, open this file in a browser:

file:///C:/Users/admin/AppData/Roaming/jupyter/runtime/nbserver-8412-open.html

Or copy and paste one of these URLs:

<http://localhost:8888/?token=b1fdf255d36d53351dd22012287625dc0cb42e351d7b0fea>

理論上，此時畫面應該會自動彈出 Jupyter 的網頁  
若沒有，可以利用上面的網址進入



Home

localhost:8888/tree

jupyter

QuitLogout

FilesRunningClusters

Select items to perform actions on them.

UploadNew

0 /

	Name	Last Modified	File size
<input type="checkbox"/>	3D Objects	1 小時前	
<input type="checkbox"/>	Contacts	1 小時前	
<input type="checkbox"/>	Desktop	1 小時前	
<input type="checkbox"/>	Documents	1 小時前	
<input type="checkbox"/>	Downloads	4 分鐘前	
<input type="checkbox"/>	Favorites	1 小時前	
<input type="checkbox"/>	Links	1 小時前	
<input type="checkbox"/>	Music	1 小時前	
<input type="checkbox"/>	OneDrive	1 小時前	
<input type="checkbox"/>	Pictures	1 小時前	
<input type="checkbox"/>	Saved Games	1 小時前	
<input type="checkbox"/>	Searches	1 小時前	
<input type="checkbox"/>	Videos	1 小時前	

3 新增一個 Folder

Home

localhost:8888/tree

jupyter

QuitLogout

5

改個喜歡的名子

RenameMove

UploadNew

1 /

NameLast ModifiedFile size

<input type="checkbox"/>	3D Objects	1 小時前
<input type="checkbox"/>	Contacts	1 小時前
<input type="checkbox"/>	Desktop	1 小時前
<input type="checkbox"/>	Documents	1 小時前
<input type="checkbox"/>	Downloads	6 分鐘前
<input type="checkbox"/>	Favorites	1 小時前
<input type="checkbox"/>	Links	1 小時前
<input type="checkbox"/>	Music	1 小時前
<input type="checkbox"/>	OneDrive	1 小時前
<input type="checkbox"/>	Pictures	1 小時前
<input type="checkbox"/>	Saved Games	1 小時前
<input type="checkbox"/>	Searches	1 小時前
<input checked="" type="checkbox"/>	Untitled Folder	幾秒前
<input type="checkbox"/>	Videos	1 小時前

4

選擇創建的資料夾

FirstProject/

localhost:8888/tree/FirstProject

jupyter

QuitLogout

FilesRunningClusters

6 新增一個 Pyhon3

Select items to perform actions on them.

UploadNew

0

/ FirstProject

Name

Last Modified

File size

..

幾秒前

The notebook list is empty.

FirstProject/ x Untitled x

localhost:8888/notebooks/FirstProject/Untitled.ipynb?kernel\_name=python3

jupyter Untitled Last Checkpoint: 幾秒前 (unsaved changes) Python Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

Run Code

```
In [1]: print("Hello")
```

Hello

# 7 Python Rock !!!

# 上傳範例 ipynb 檔

- ipynb 全名為 ipython notebook
- Jupyter 所用的附檔名

Home


localhost:8888/tree

☆

○

L

⋮

 jupyter

QuitLogout


FilesRunningClusters

Select items to perform actions on them.

1 選擇 Upload

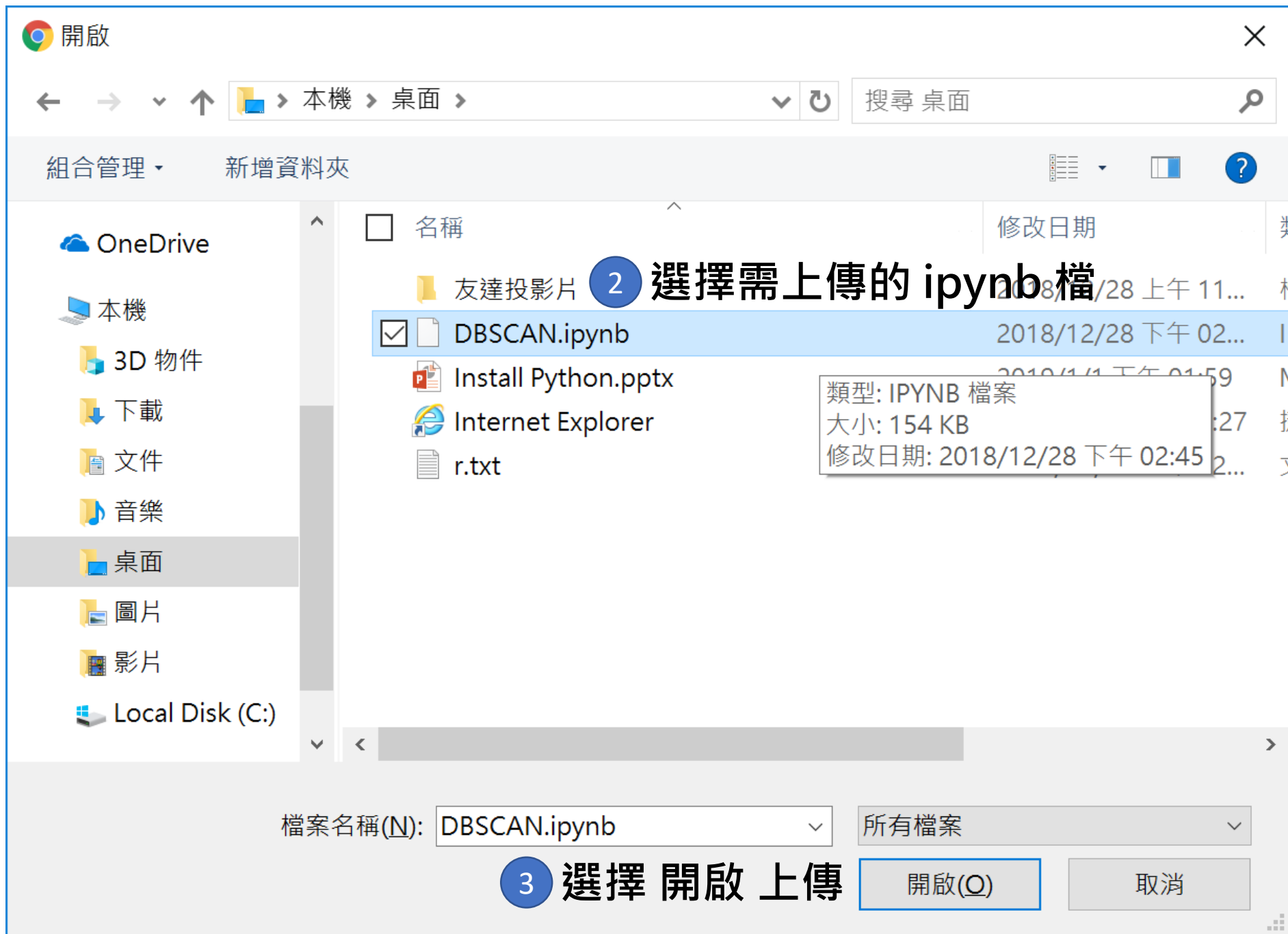
UploadNew↺

☐ 0 ▾

 /

Name ▾Last ModifiedFile size

The notebook list is empty.



Home

localhost:8888/tree

☆

L

jupyter

QuitLogout

FilesRunningClusters

Select items to perform actions on them.

UploadNew↺

0

/

Name↓Last ModifiedFile size

The notebook list is empty.

DBSCAN.ipynb

4 選擇 Upload

UploadCancel



Home


localhost:8888/tree

☆

○

L

⋮

 jupyter


QuitLogout

FilesRunningClusters

Select items to perform actions on them.

UploadNew↺


☐ 0 ▾

 /

Name ▾

Last Modified

File size

☐  DBSCAN.ipynb

4 分鐘前

158 kB

5

點選開始執行範例

