



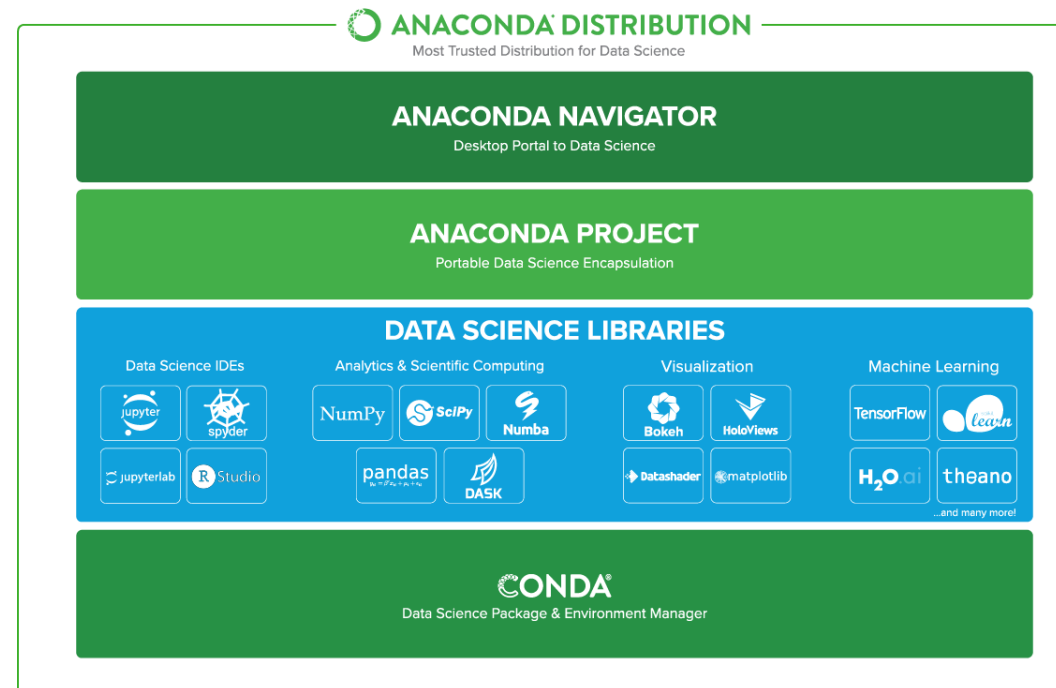
ak系列 – Environment

(Anaconda: Python3.6)



Anaconda

- Anaconda has pre-packaged 1,400+ data science packages for Python/R
- Anaconda helps to manage python packages, dependencies and environments



使用**Ananconda**可以簡化
相關Python的環境設定與
函式庫的管理



Step1. Install Anaconda

Anaconda installation

- Go to Anaconda official web site:
 - <https://www.anaconda.com>

Click “Download Now” of “ANACONDA DISTRIBUTION”



Anaconda Distribution: Win, Mac & Linux

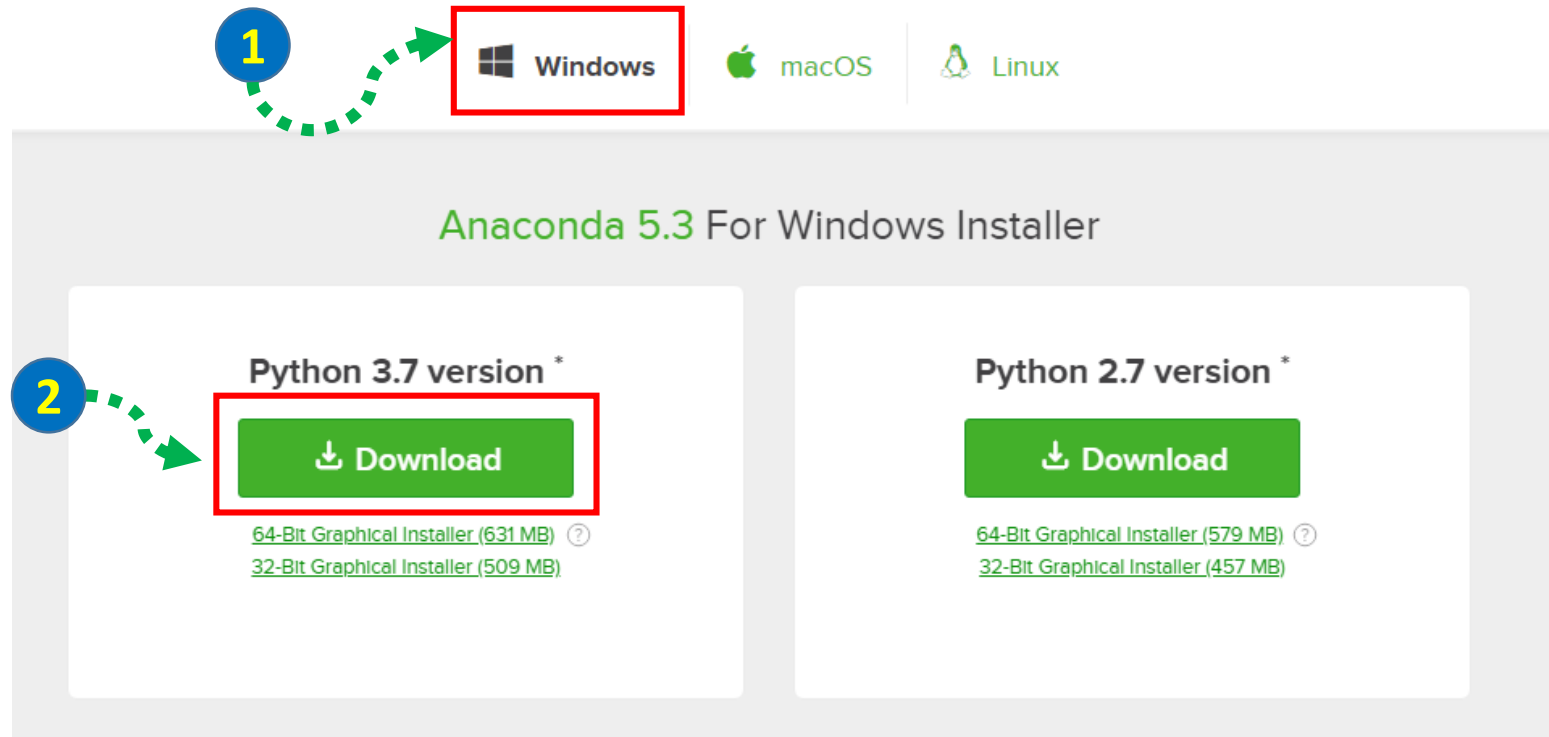
- As of Today, the most update version is Version **5.3**
- Choose different distribution according to O.S of your machine



Anaconda Distribution: Win

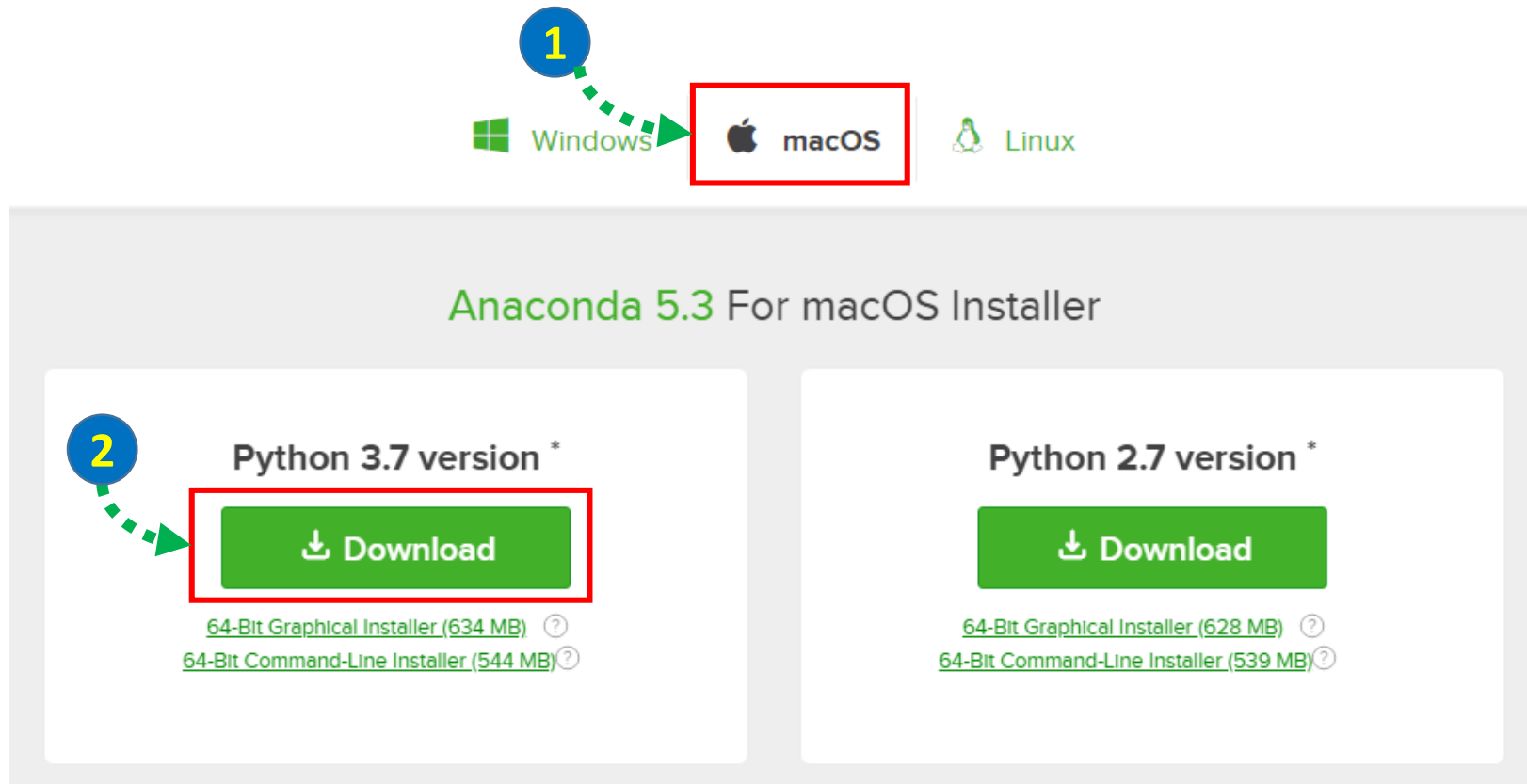


- Click “Download” for Python 3.7 version



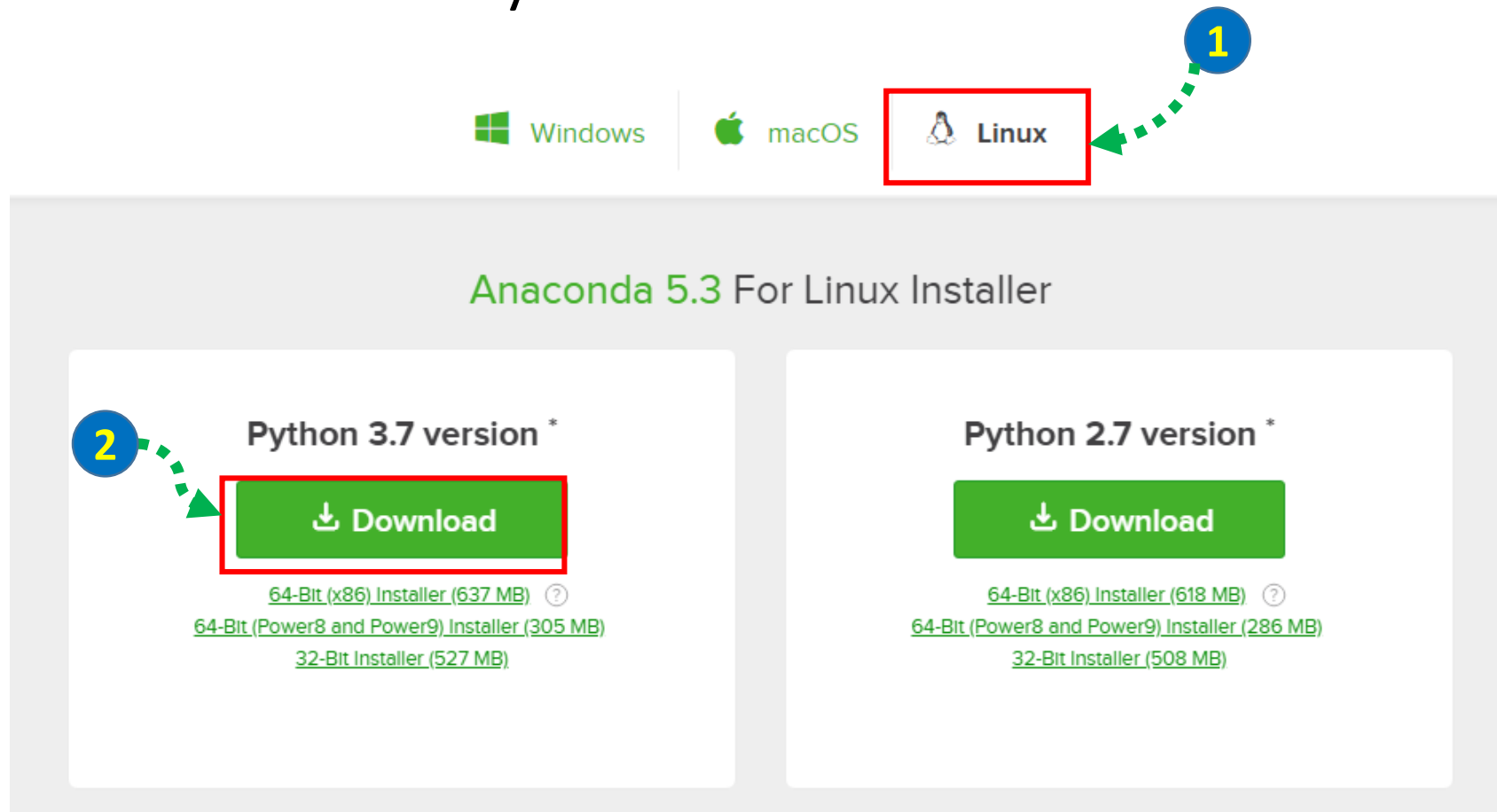
Anaconda Distribution: Mac

- Click “Download” for Python 3.7 version



Anaconda Distribution: Linux

- Click “Download” for Python 3.7 version



Anaconda Details Installation Steps

- You can find detail installation steps in below link:
 - <https://docs.anaconda.com/anaconda/install/>

▶ Home

▶ Anaconda Enterprise 5

▶ Anaconda Enterprise 4

▼ Anaconda Distribution

Installation

Installing on Windows

Installing on macOS

Installing on Linux

Verifying Anaconda Installation (Method#1)

Anaconda Navigator

- Open Anaconda Navigator, which is automatically installed when you install Anaconda
 - **Windows:** Click Start - then from the shortcuts, select **Anaconda Navigator**. If it opens, you have successfully installed Anaconda.
 - **macOS:** Click Launchpad - then select **Anaconda Navigator**. If it opens, you have successfully installed Anaconda.



Anaconda Navigator
桌面應用程式

Verifying Anaconda Installation (Method#2)

Conda

- To open Anaconda Prompt (or Terminal on Linux or macOS):
 - **Windows:** Open the Anaconda Prompt (Click Start, select **Anaconda Prompt**)
 - **macOS:** Open Launchpad, then open **Terminal** or iTerm.
 - **Linux–CentOS:** Open Applications - System Tools - **Terminal**.
 - **Linux–Ubuntu:** Open the Dash by clicking the upper left Ubuntu icon, then type “**terminal**”.

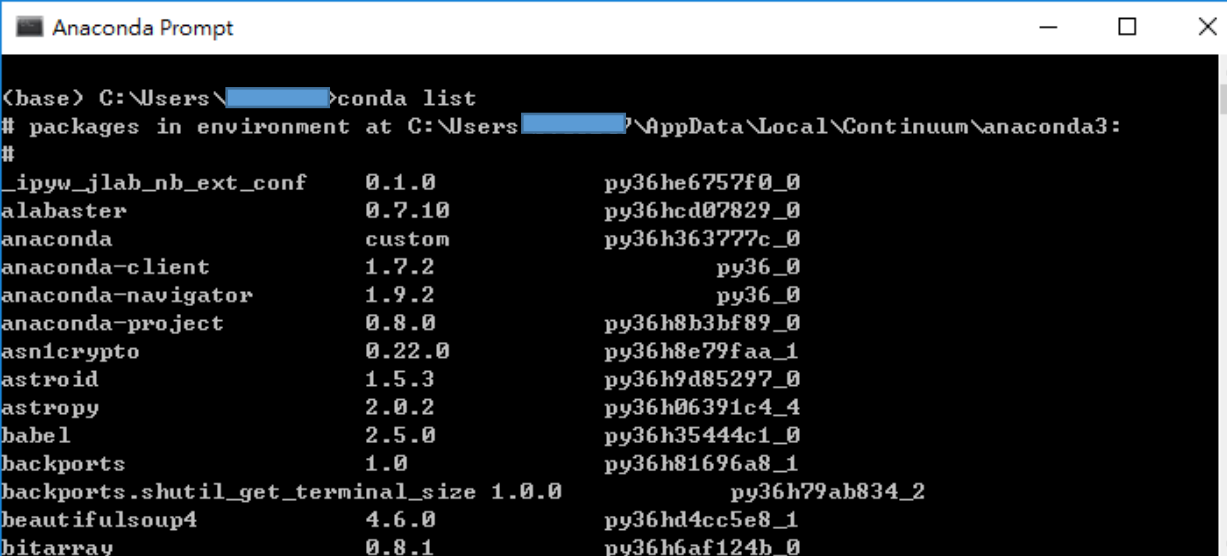


Anaconda Prompt
桌面應用程式

Verifying Anaconda Installation (Method#2)

Conda

- After opening Anaconda prompt (Terminal on Linux or macOS), choose any of the following methods:
 - Enter a command such as “**conda list**”. If Anaconda is installed and working, this will display a list of installed packages and their versions.



```
Anaconda Prompt
(base) C:\Users\>conda list
# packages in environment at C:\Users\AppData\Local\Continuum\anaconda3:
#
_ipyw_jlab_nb_ext_conf    0.1.0                py36he6757f0_0
alabaster                 0.7.10              py36hcd07829_0
anaconda                  custom              py36h363777c_0
anaconda-client           1.7.2                py36_0
anaconda-navigator        1.9.2                py36_0
anaconda-project          0.8.0                py36h8b3bf89_0
asn1crypto                0.22.0              py36h8e79faa_1
astroid                   1.5.3                py36h9d85297_0
astropy                   2.0.2                py36h06391c4_4
babel                     2.5.0                py36h35444c1_0
backports                 1.0                  py36h81696a8_1
backports.shutil_get_terminal_size 1.0.0                py36h79ab834_2
beautifulsoup4            4.6.0                py36hd4cc5e8_1
bitarray                  0.8.1                py36h6af124b_0
```

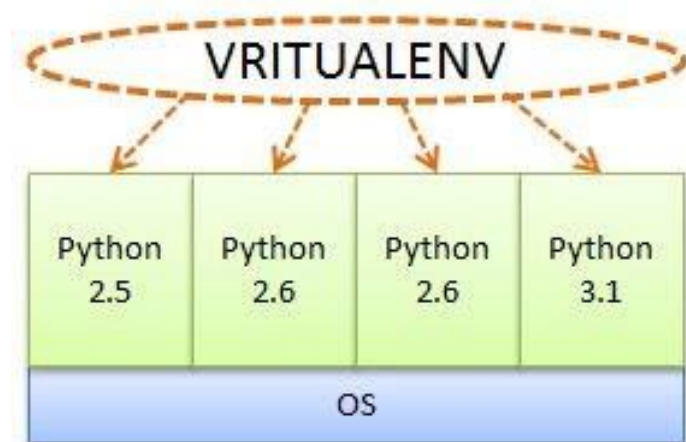


Step2. Create Virtual Env.

What is Virtual Environment?

Python Virtual Environment

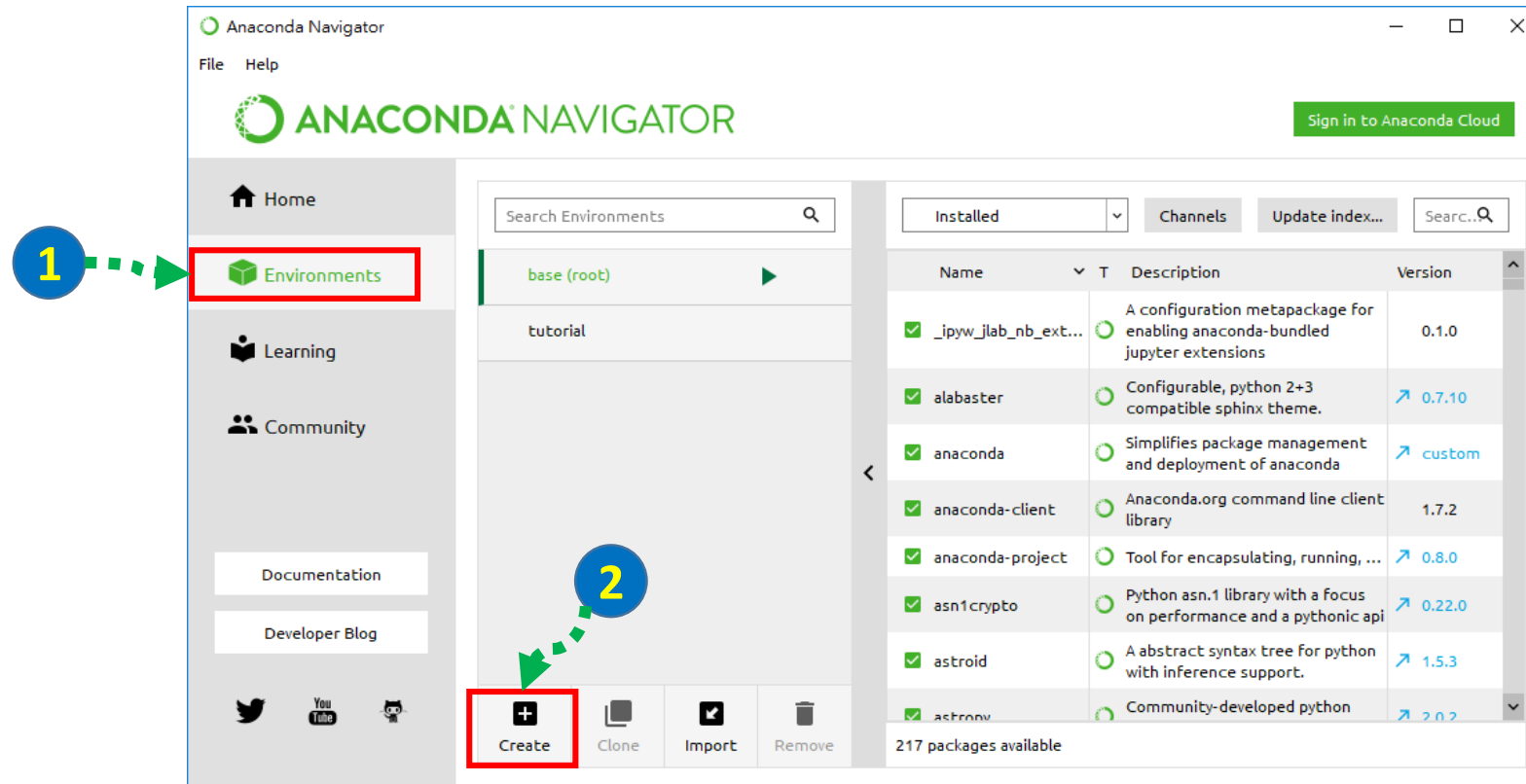
- The main purpose of Python virtual environments is to create an isolated environment for Python projects.
- This means that each project can have its own dependencies, regardless of what dependencies every other project has.



Create Virtual Environment

Step. 1

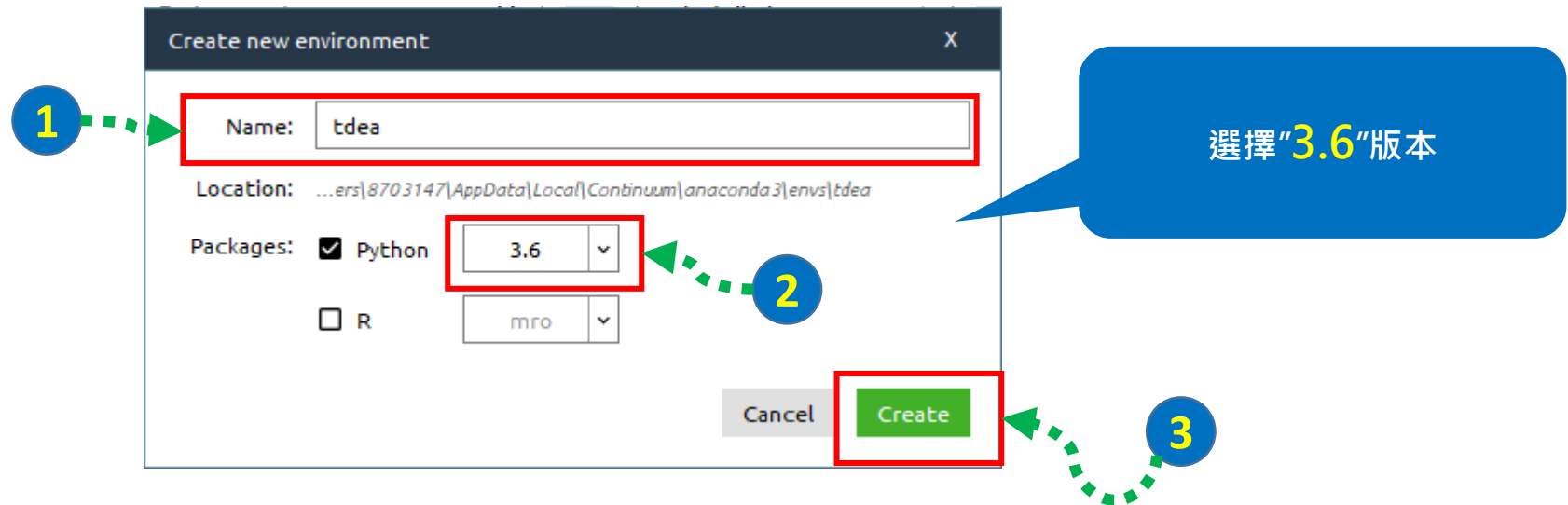
- Open Anaconda Navigator



Create Virtual Environment

Step. 2

- Open Anaconda Navigator

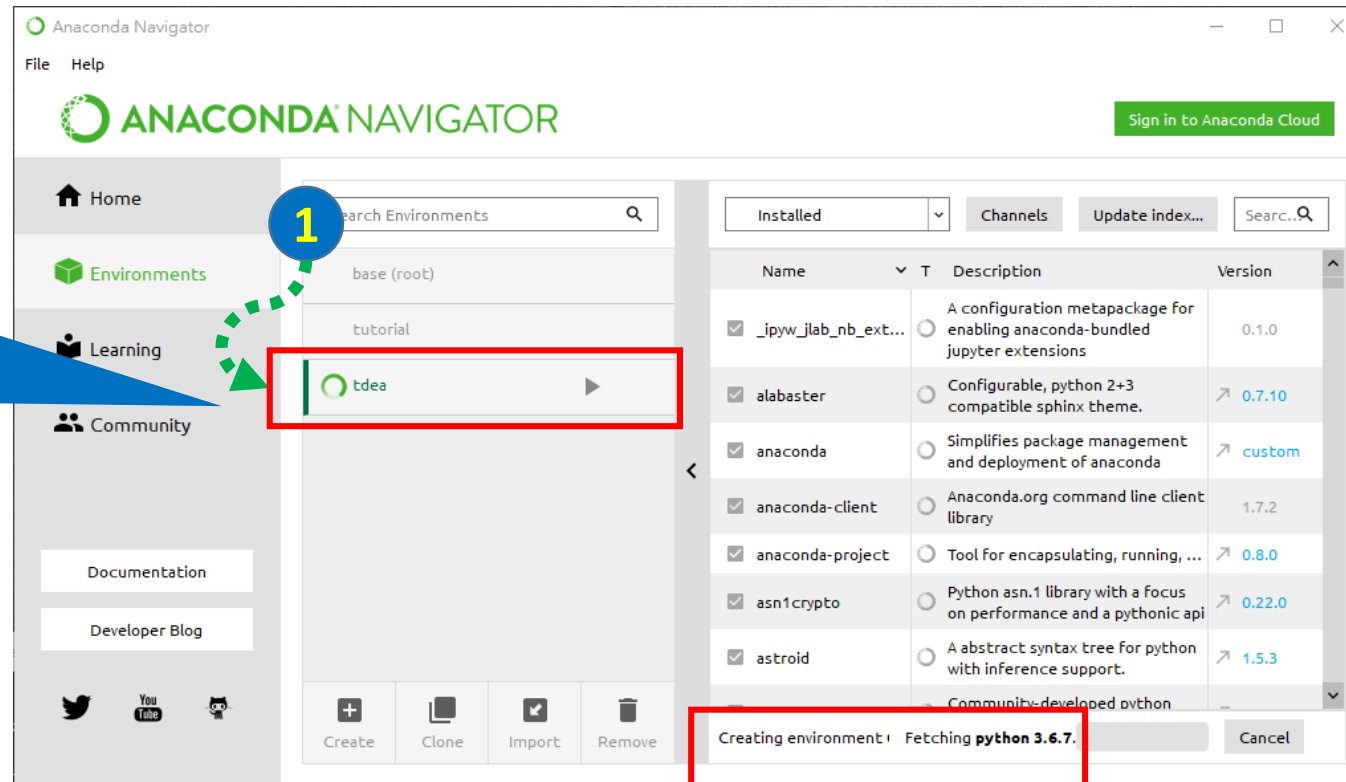


Create Virtual Environment

Step. 3

- Waiting Anaconda to create environment

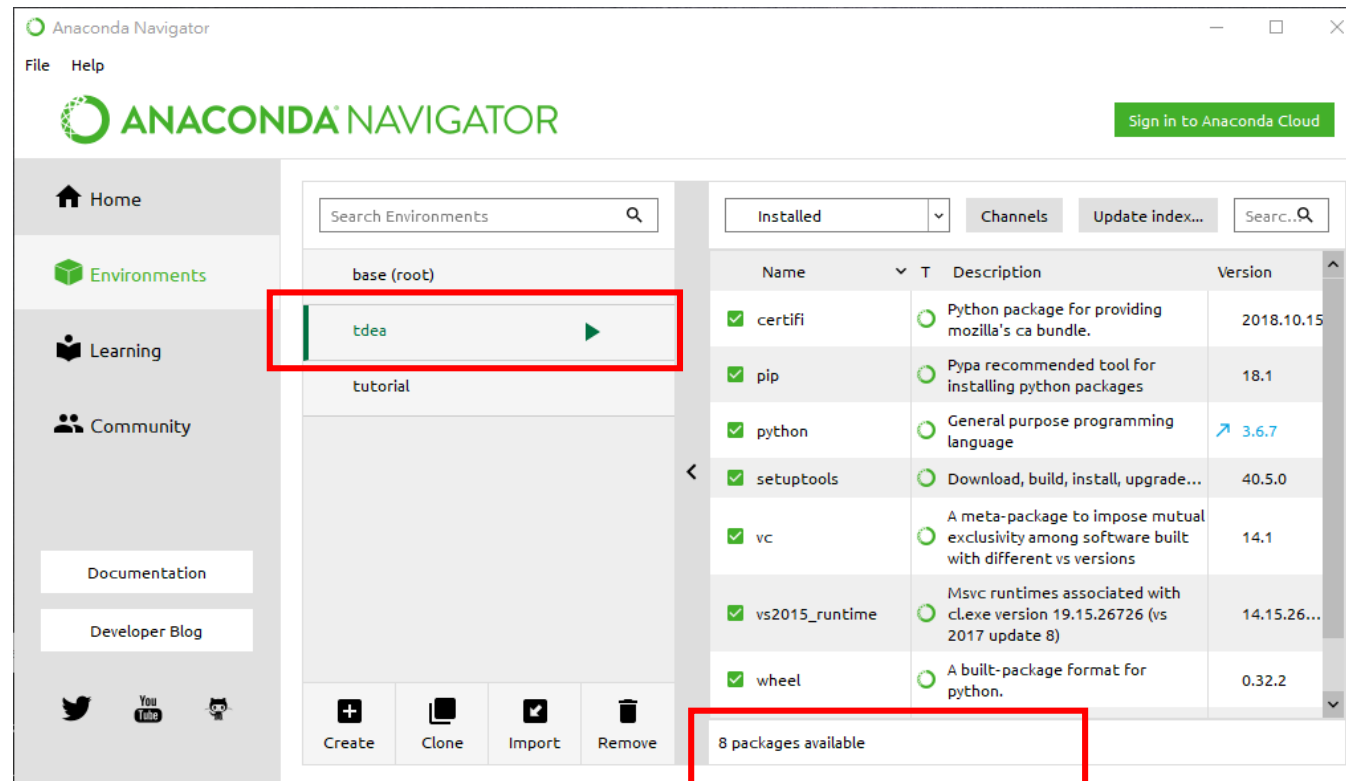
Environment的創建會花一點時間, 確保網路連線的暢通呀!!



Create Virtual Environment

Step. 4

- Anaconda complete environment creation





Step3. Install Kafka Client Lib.

Install Kafka Client Library

Step. 1

- Open Virtual Environment Terminal

點選“tdea”的env, 然後在 pop out 的 menu 中點選“Open Terminal”

The screenshot shows the Anaconda Navigator interface. On the left sidebar, the 'Environments' tab is selected. The main panel displays a list of environments: 'base (root)', 'tdea', and 'tutorial'. The 'tdea' environment is highlighted. A context menu is open over 'tdea', with 'Open Terminal' selected and highlighted with a red box. The right panel shows a list of installed packages for the selected environment.

Name	Description	Version
Python package for providing mozilla's ca bundle.		2018.10.15
Pypa recommended tool for installing python packages		18.1
General purpose programming language		3.6.7
Download, build, install, upgrade...		40.5.0
A meta-package to impose mutual exclusivity among software built with different vs versions		14.1
Msvc runtimes associated with cl.exe version 19.15.26726 (vs 2017 update 8)		14.15.26...
A built-package format for python.		0.32.2

8 packages available

Install Kafka Client Library

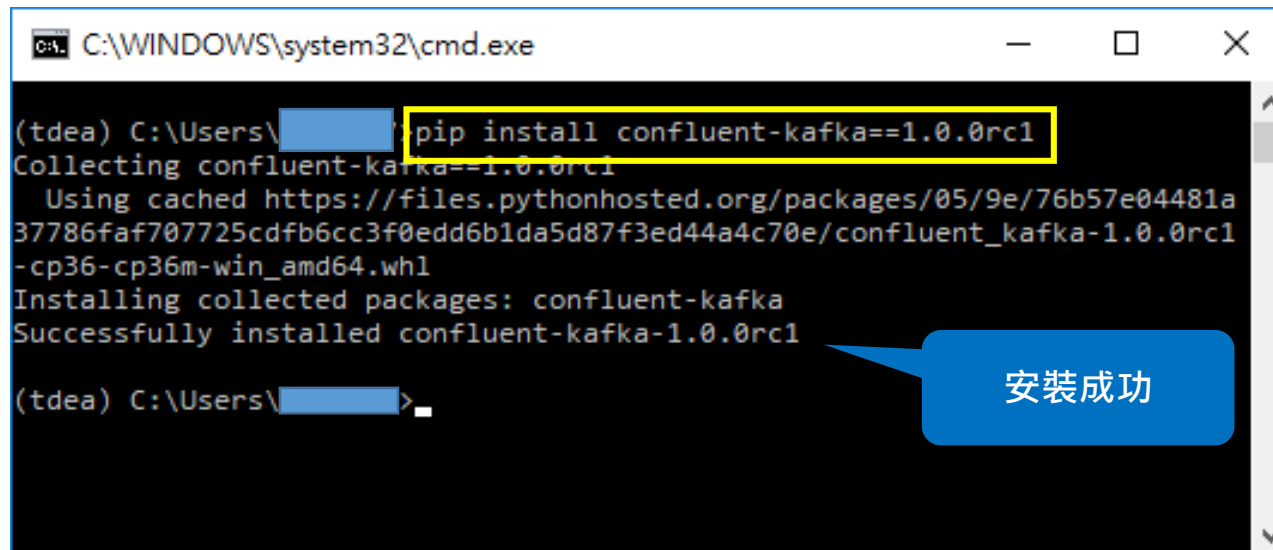
Step. 2

- Install “confluent-kafka” library

```
$ pip install confluent-kafka==1.0.0rc1
```

有助教反應在Mac上安裝
1.0.0rc1會有錯誤訊息, 如果有相
同問題的學員, 可以安裝使用
confluent-kafka 0.11.6

```
pip install confluent-kafka==0.11.6
```



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

(tdea) C:\Users\[redacted]> pip install confluent-kafka==1.0.0rc1
Collecting confluent-kafka==1.0.0rc1
  Using cached https://files.pythonhosted.org/packages/05/9e/76b57e04481a37786faf707725cdfb6cc3f0edd6b1da5d87f3ed44a4c70e/confluent_kafka-1.0.0rc1-cp36-cp36m-win_amd64.whl
Installing collected packages: confluent-kafka
Successfully installed confluent-kafka-1.0.0rc1

(tdea) C:\Users\[redacted]>
```

安裝成功

