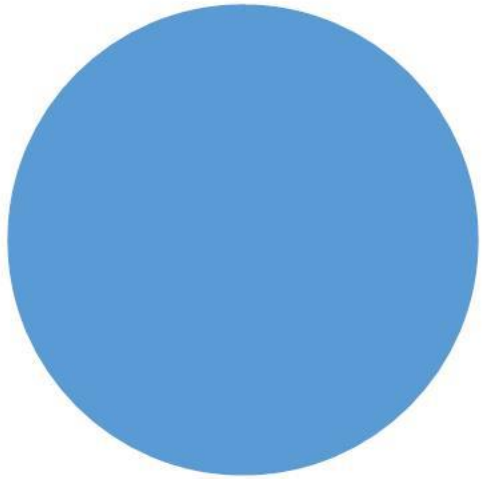



Anaconda Tutorial

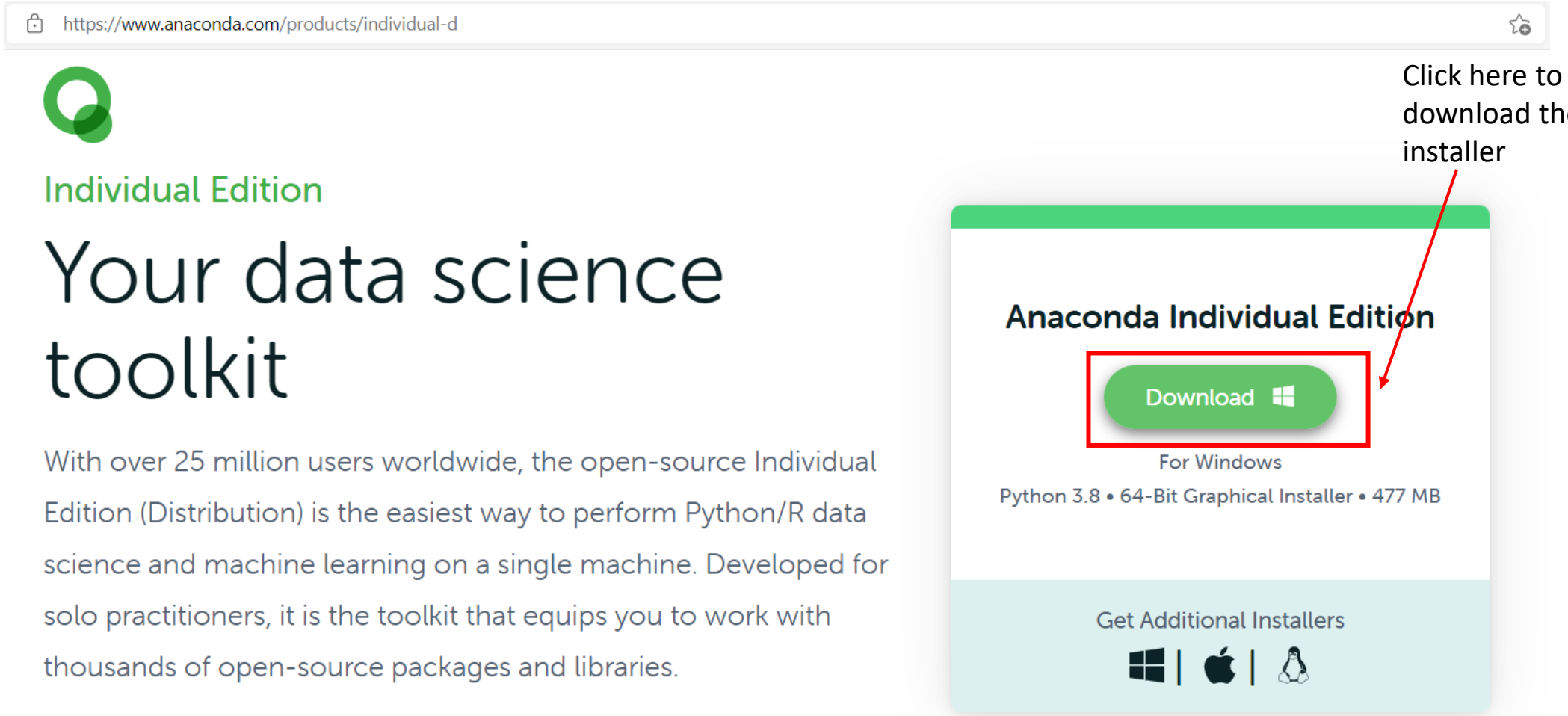
COMP3278A 2022

By Peng Xu

Installation guide for Windows user

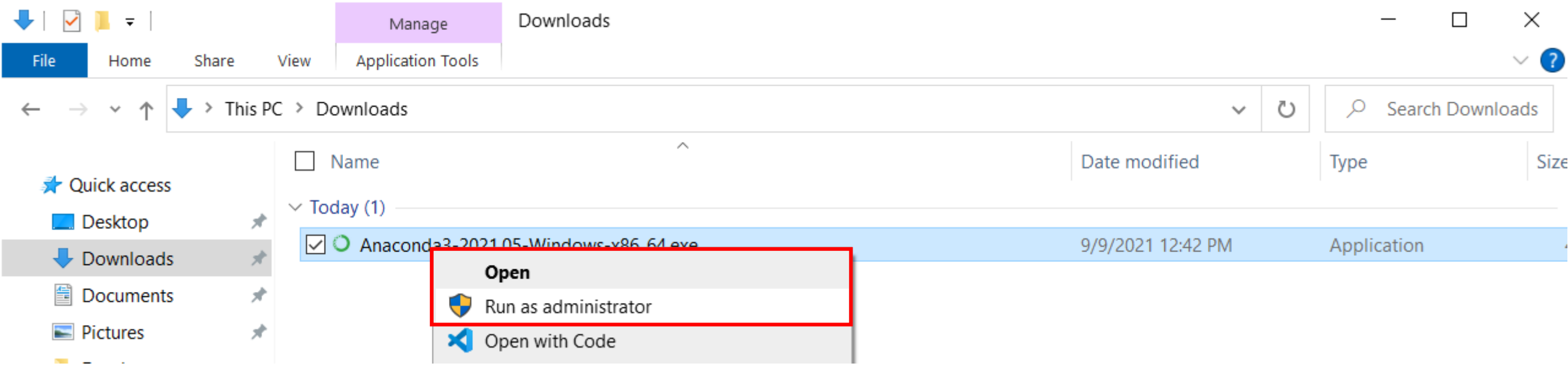
1. Download Anaconda Installer

You can find anaconda installer by searching anaconda in your search engine or directly go to [Anaconda | Individual Edition]



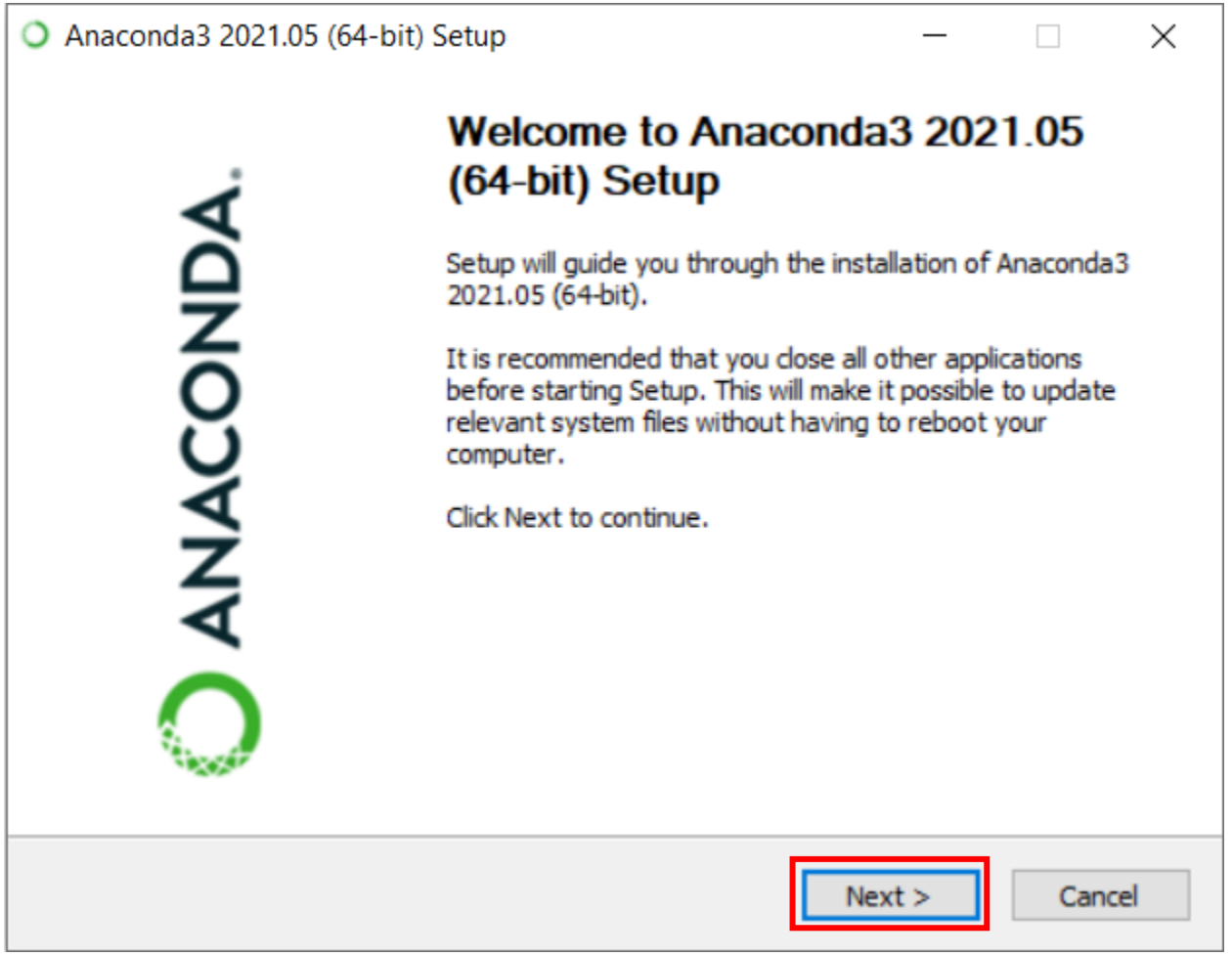
2. Install Anaconda

Open the installer directly or run as administrator if you do not have permission to install anaconda in the desired location.



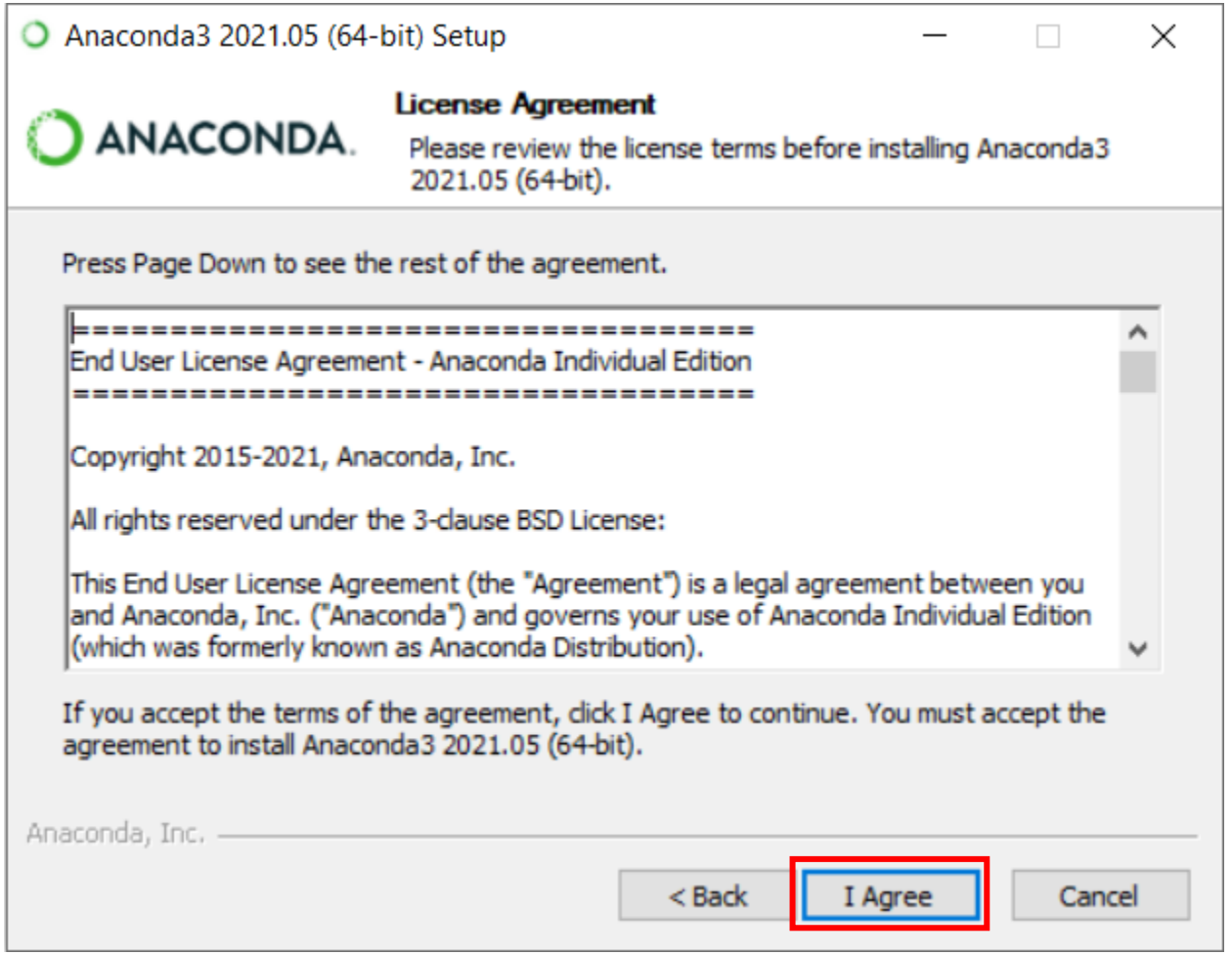
2. Install Anaconda

Click the Next button directly.



2. Install Anaconda

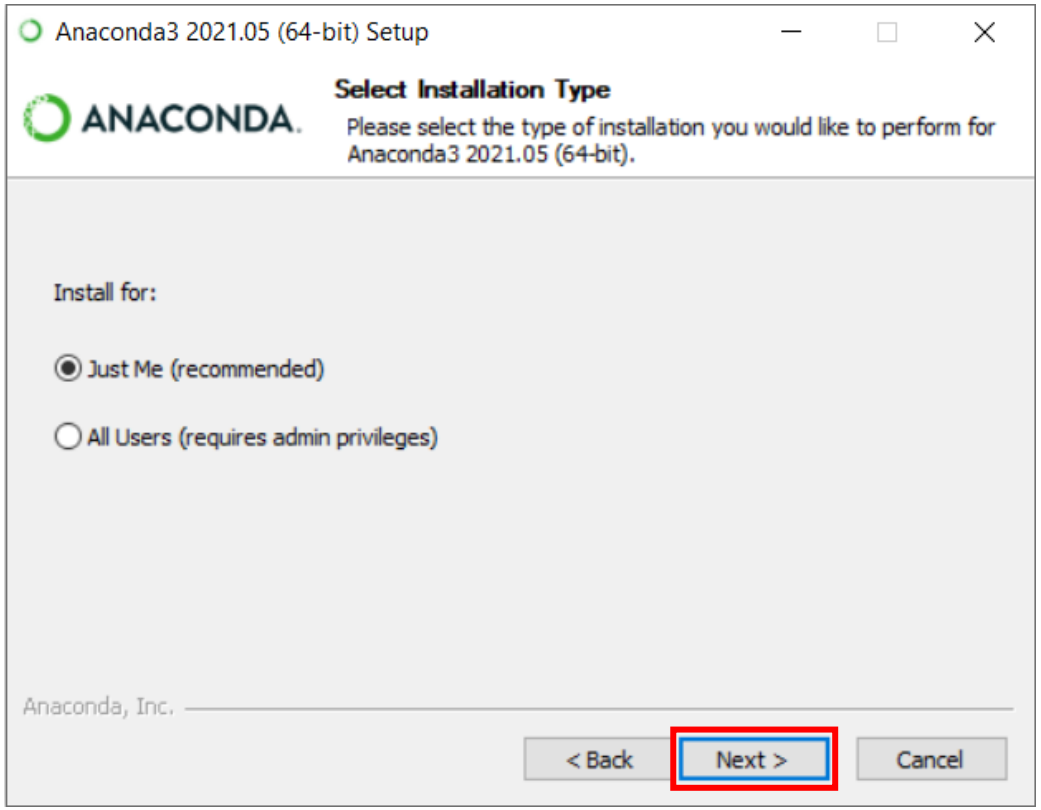
Read the agreement and Click the “I Agree” button.



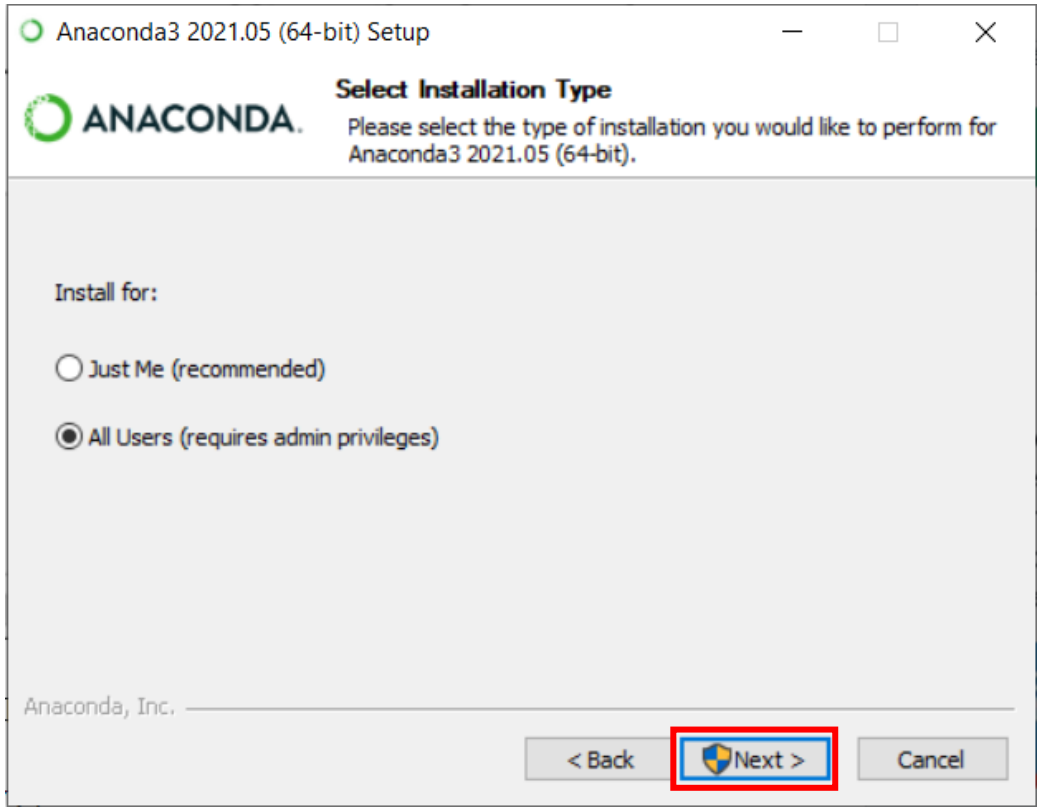
2. Install Anaconda

Choose “Just Me” or “All Users”. If you’re not sure which one to choose, please choose “Just Me”. Then click the Next button.

Recommended Approach



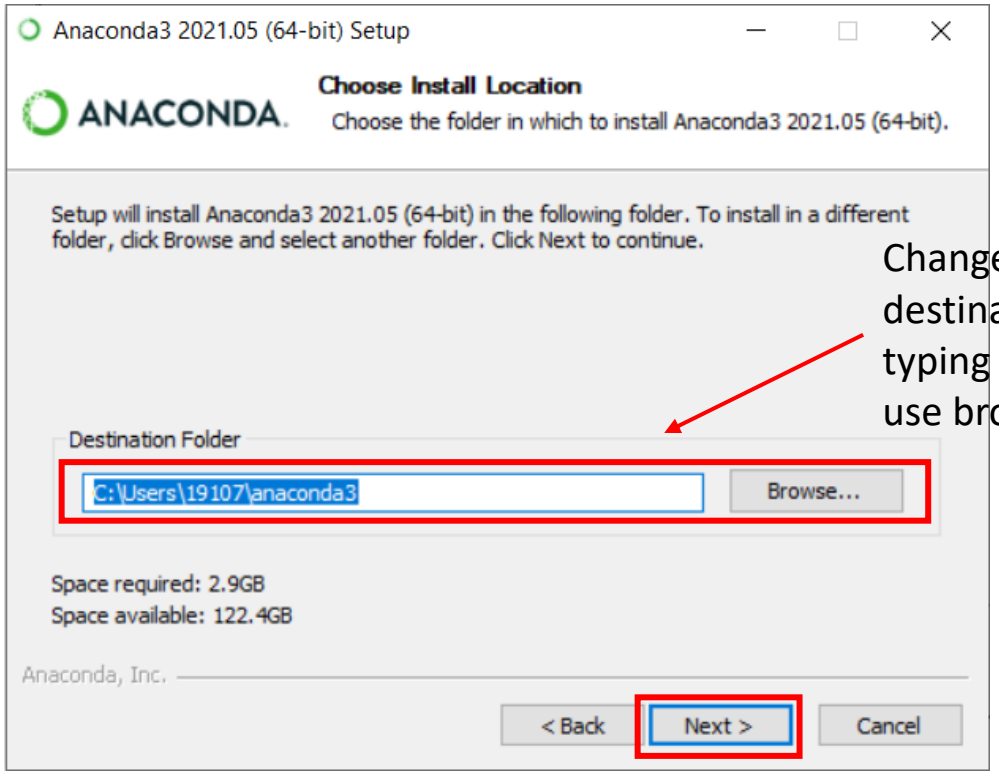
Alternative Approach



2. Install Anaconda

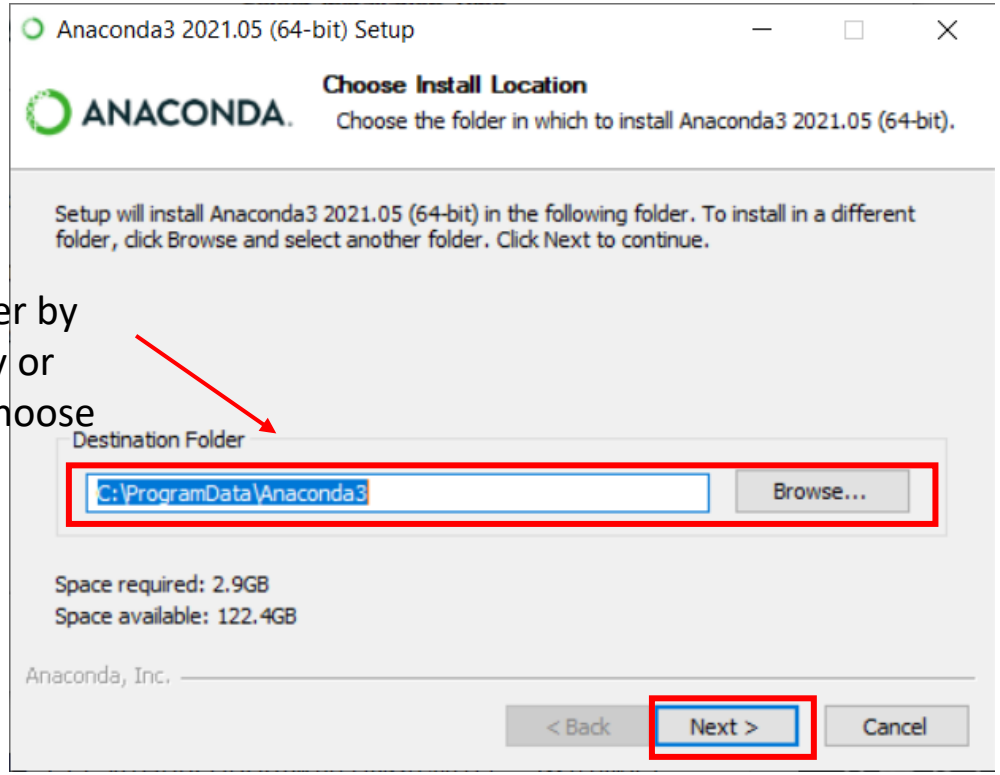
Choose your destination folder and click the Next button.

Destination Folder Example (Just Me)



Change your destination folder by typing in directly or use browse to choose

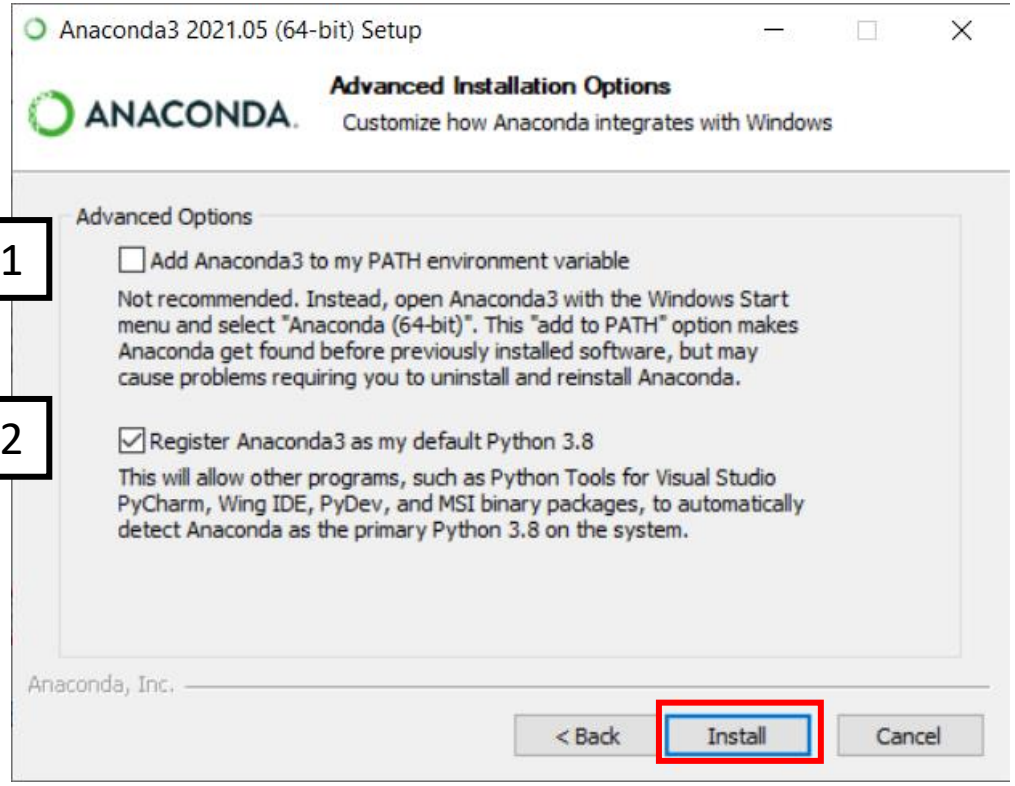
Destination Folder Example (All Users)



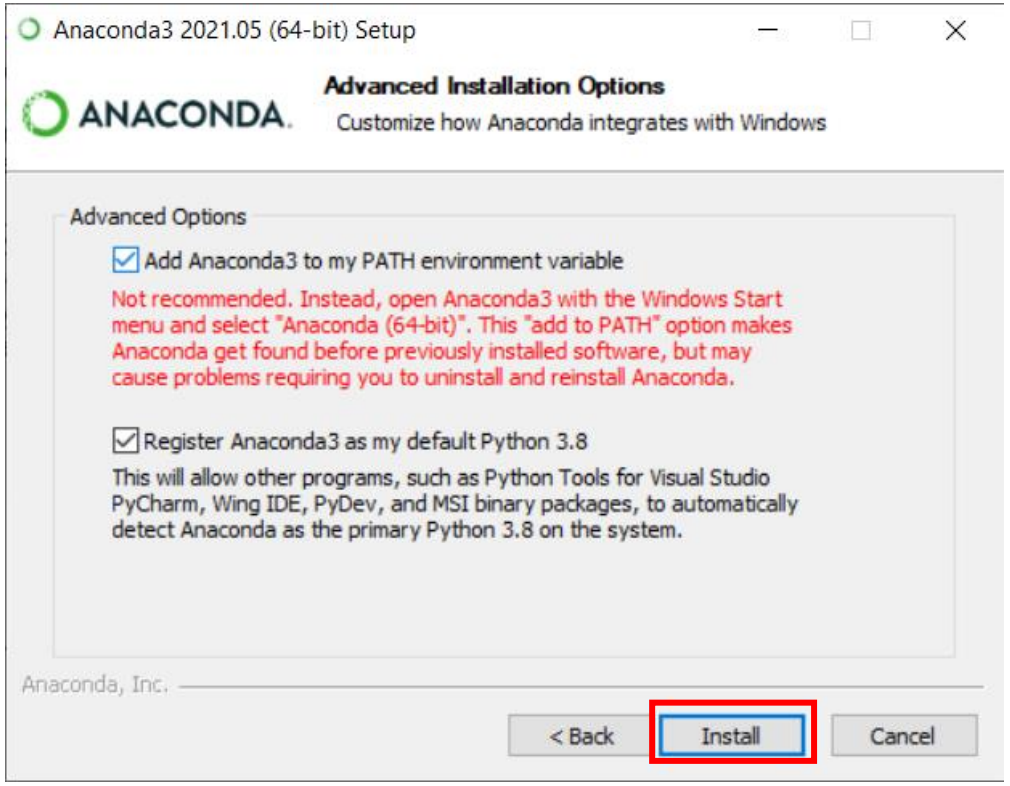
2. Install Anaconda

Choosing 1 means your PATH environment variable will be edited and it may lead to some errors if you already have a python environment in your computer. You can also add Anaconda3 into your PATH environment variable manually if you do not choose 1. Then click the Install button.

Recommended Approach

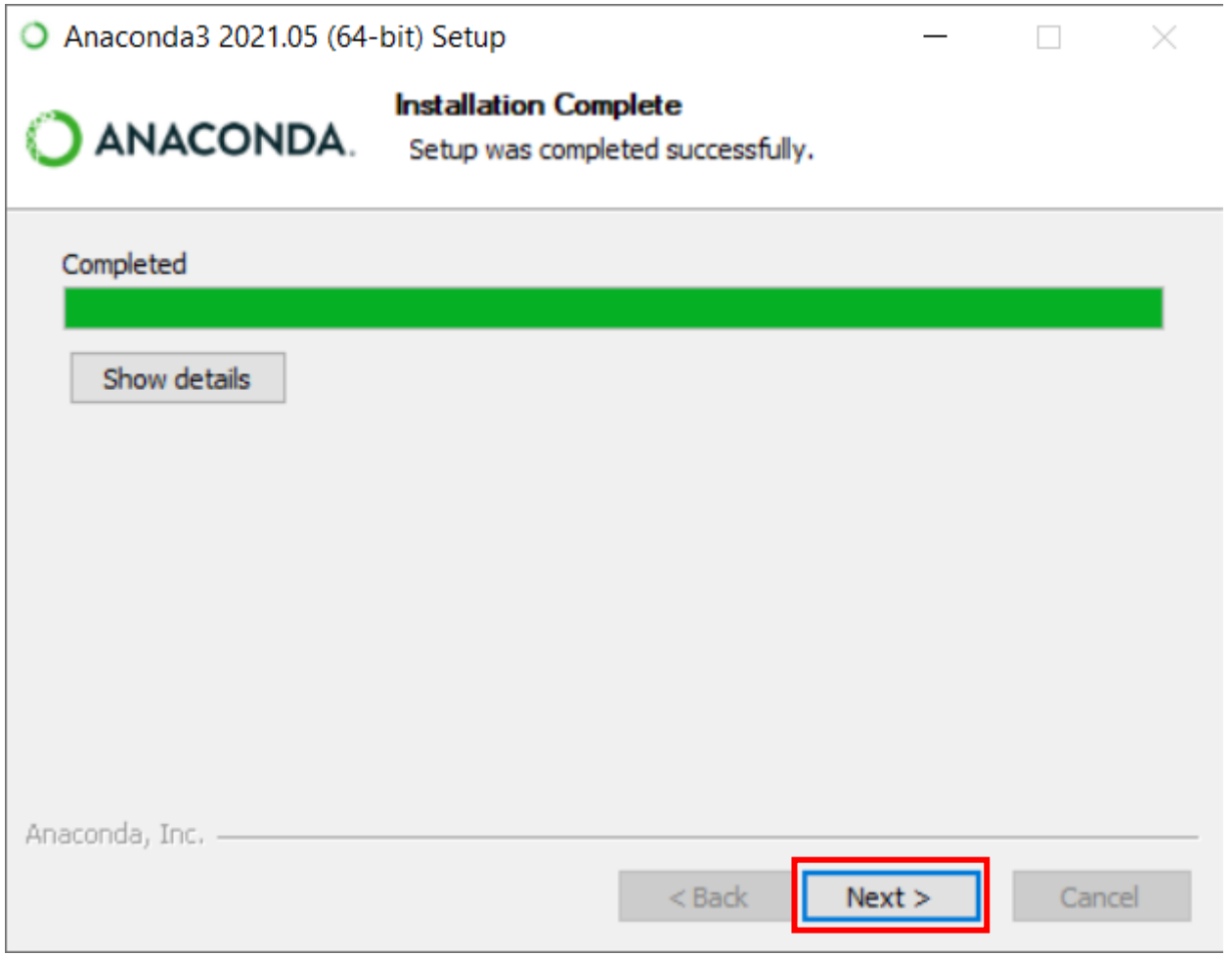


Alternative Approach



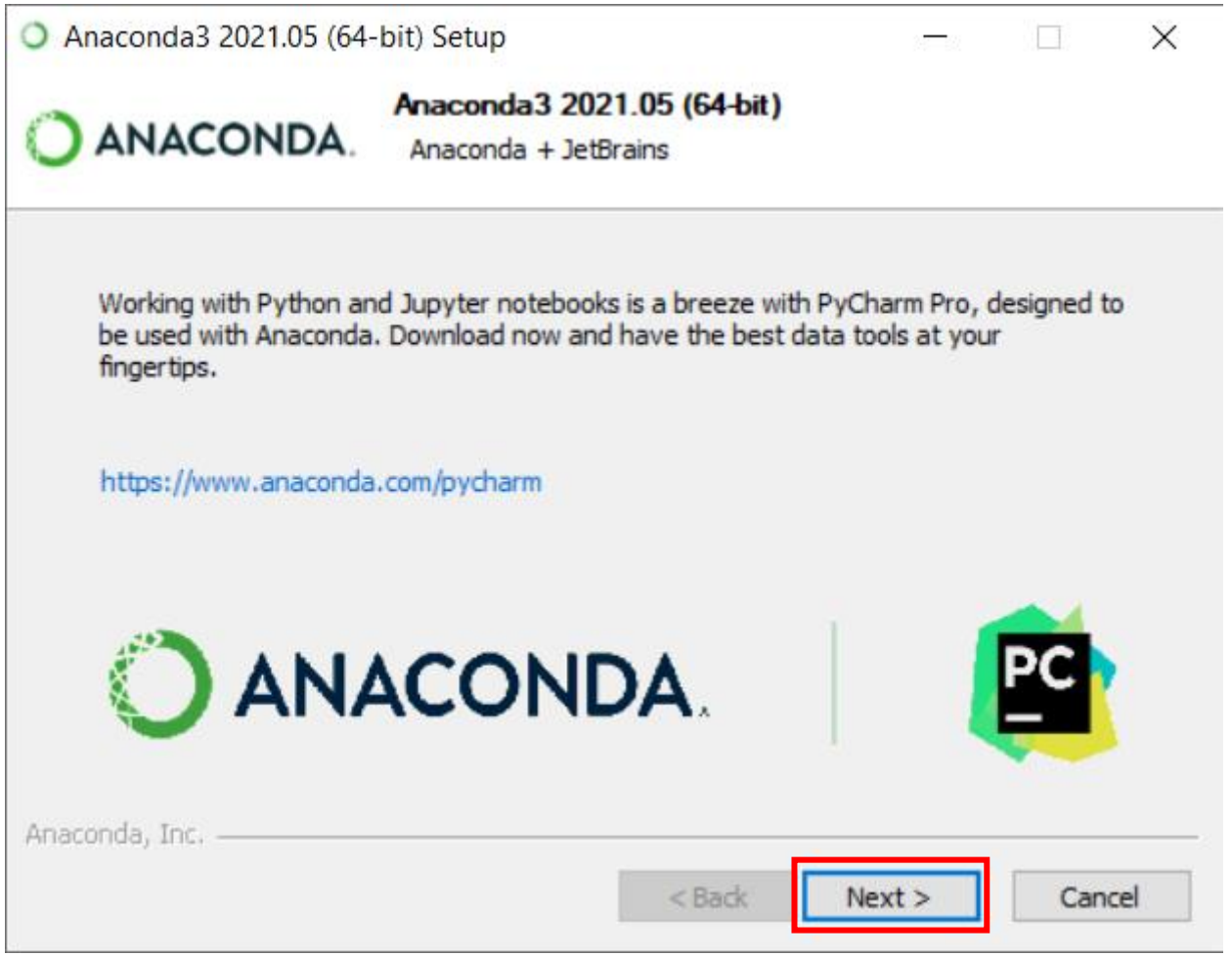
2. Install Anaconda

Click the Next button directly.



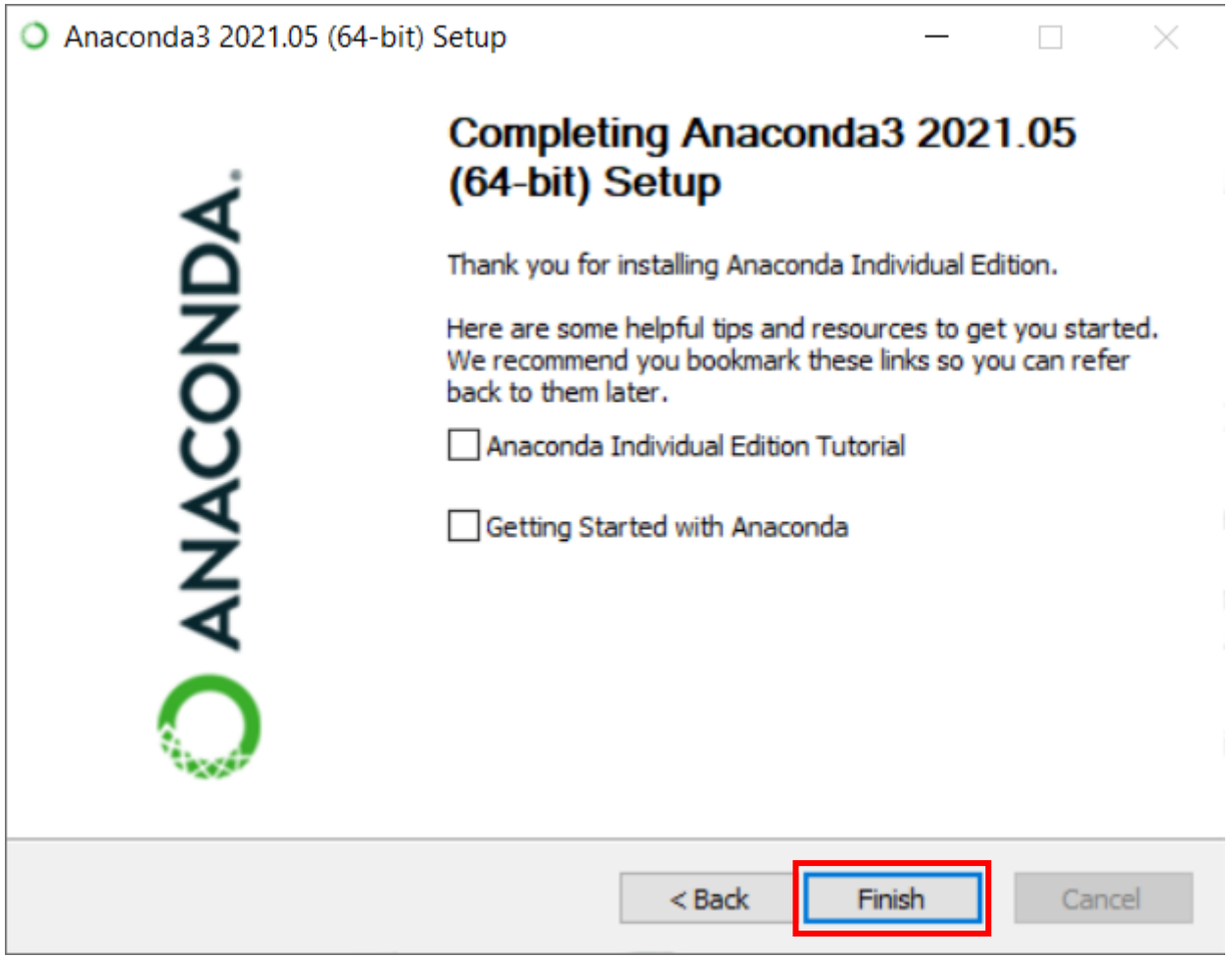
2. Install Anaconda

You can install PyCharm if you want. Then click the Next button.



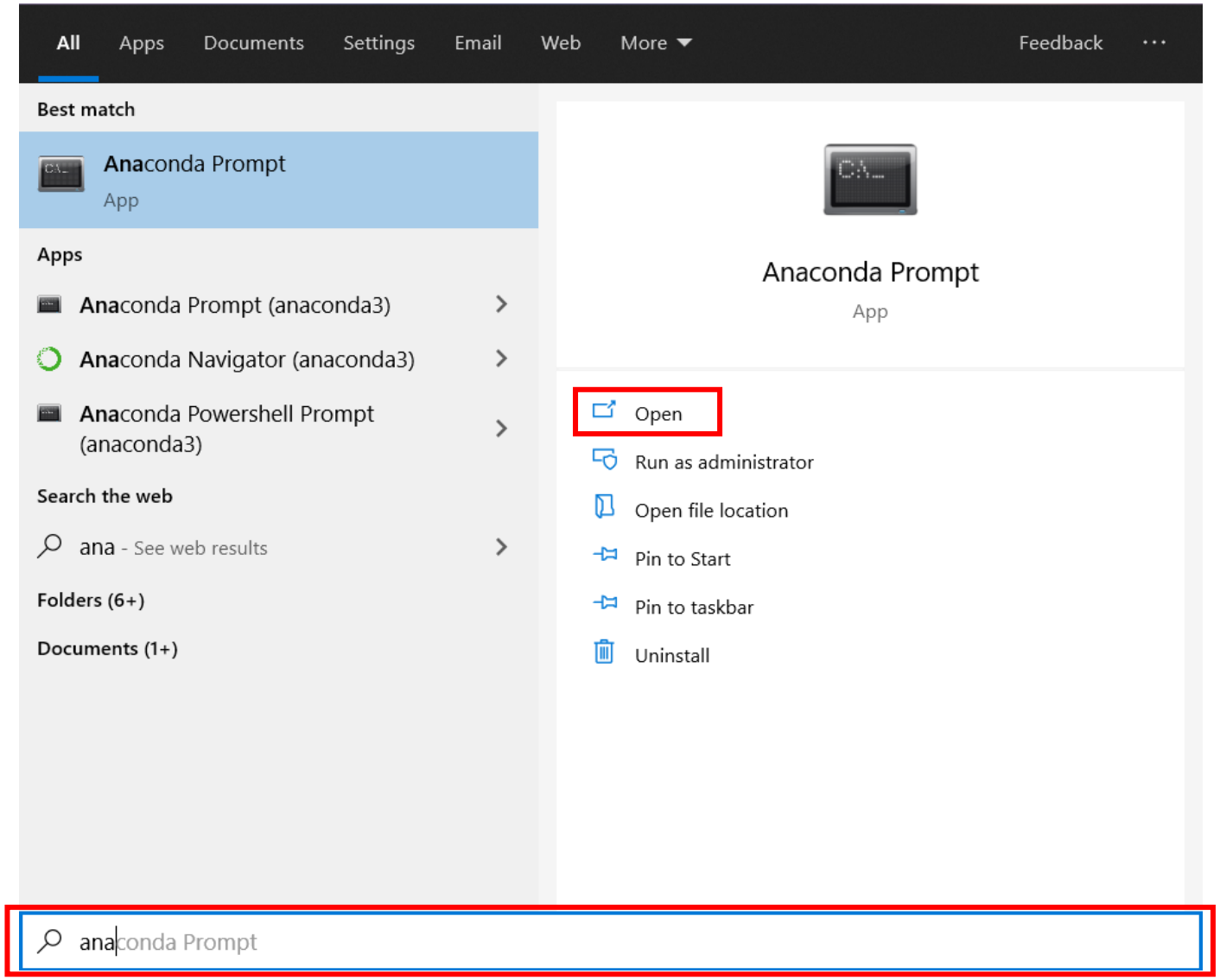
2. Install Anaconda

Click the Finish button.



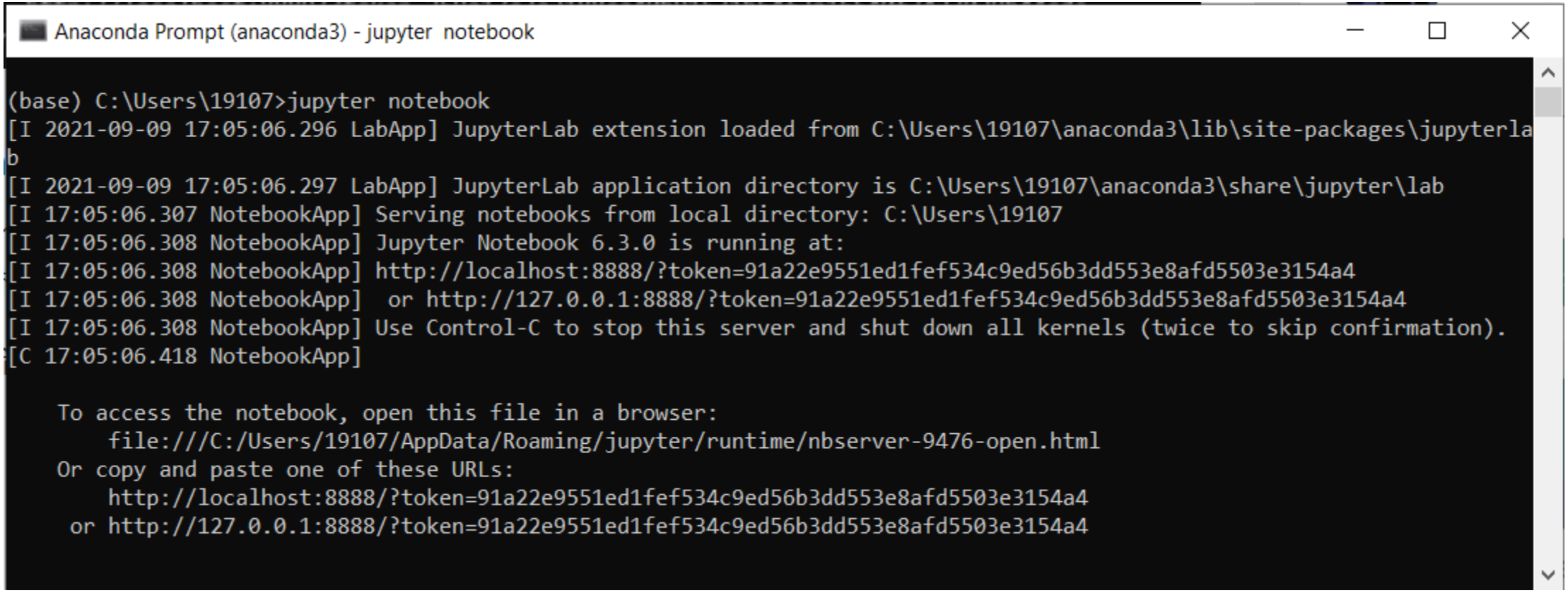
3. Check your installation

Press Win+Q and search Anaconda Prompt.



3. Check your installation

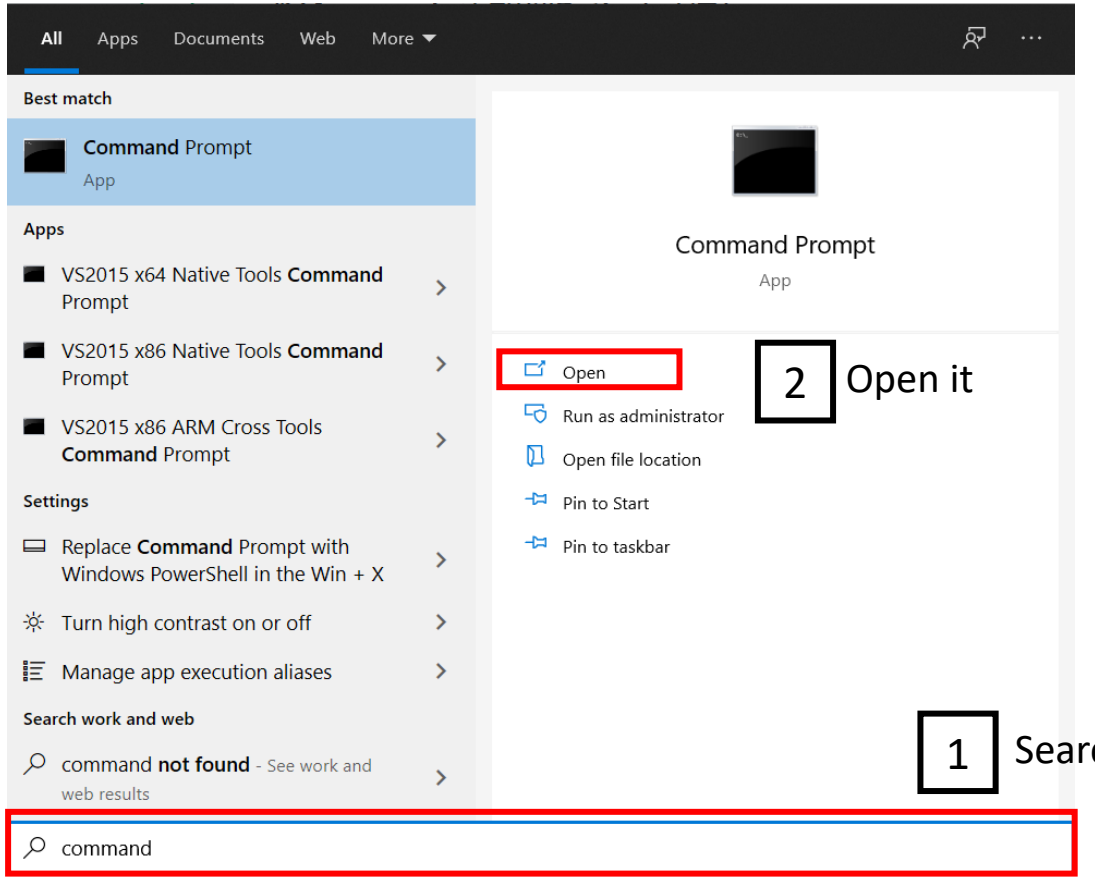
Input “jupyter notebook” and press Enter. If you get an output similar to the image below, congratulations on your successful installation.



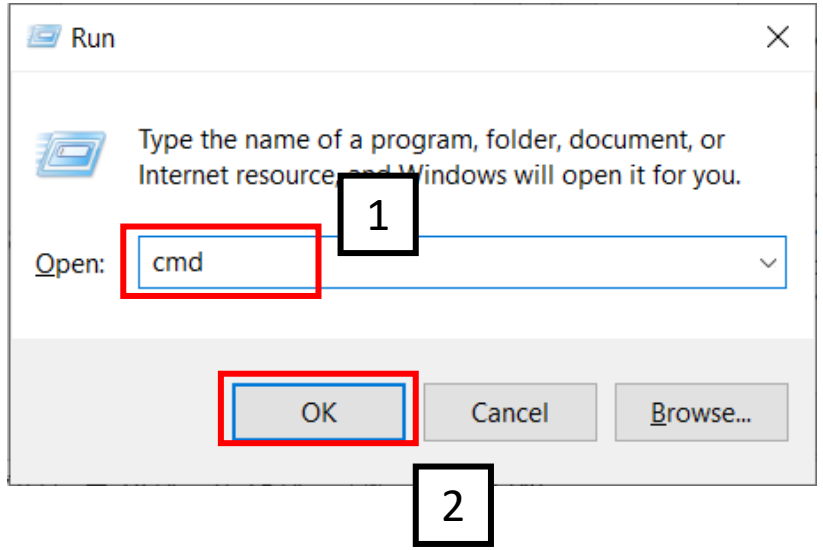
4. Add Anaconda3 into your PATH environment variable (optional)

You will need this part if you do not choose “Add Anaconda3 into your PATH environment variable” and you want to use anaconda in your Command Prompt. Firstly, open your Command Prompt.

Press Win+Q



Press Win+R

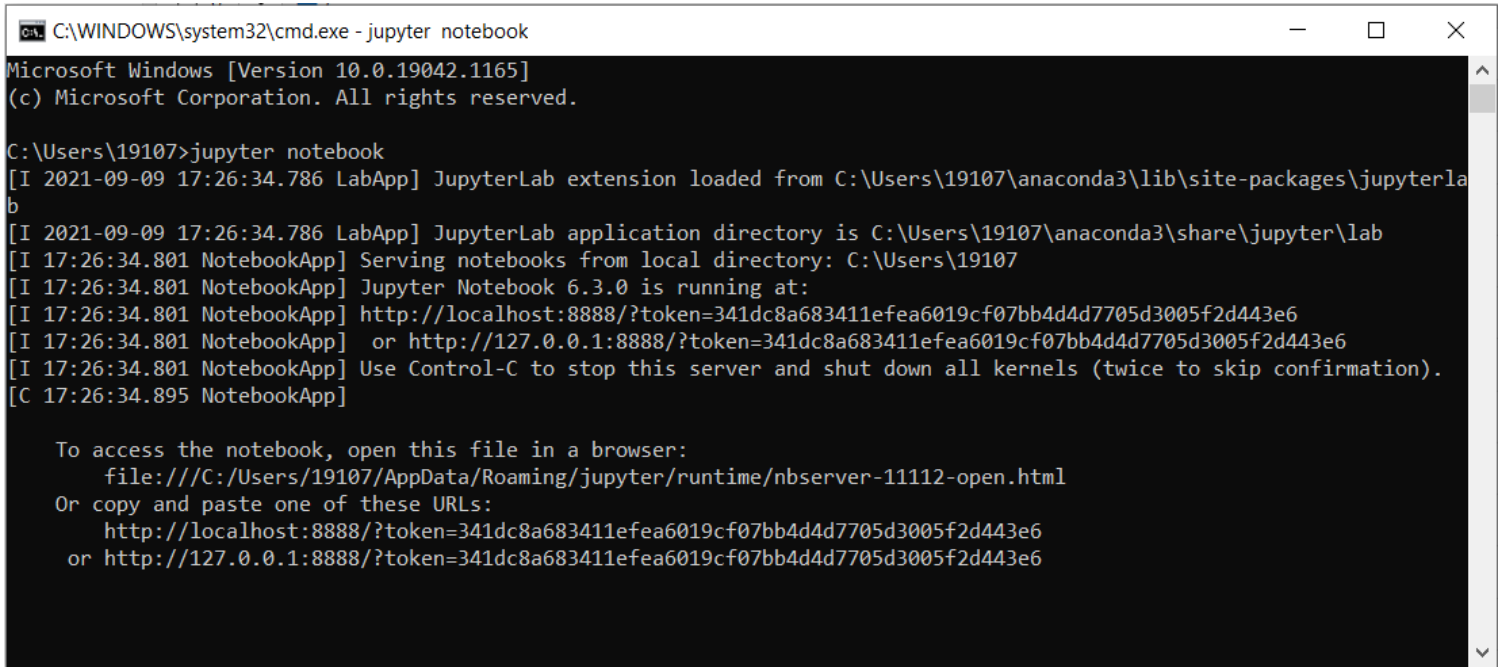


4. Add Anaconda3 into your PATH environment variable (optional)

Input “Jupyter notebook” to check whether you have added Anaconda into your PATH.

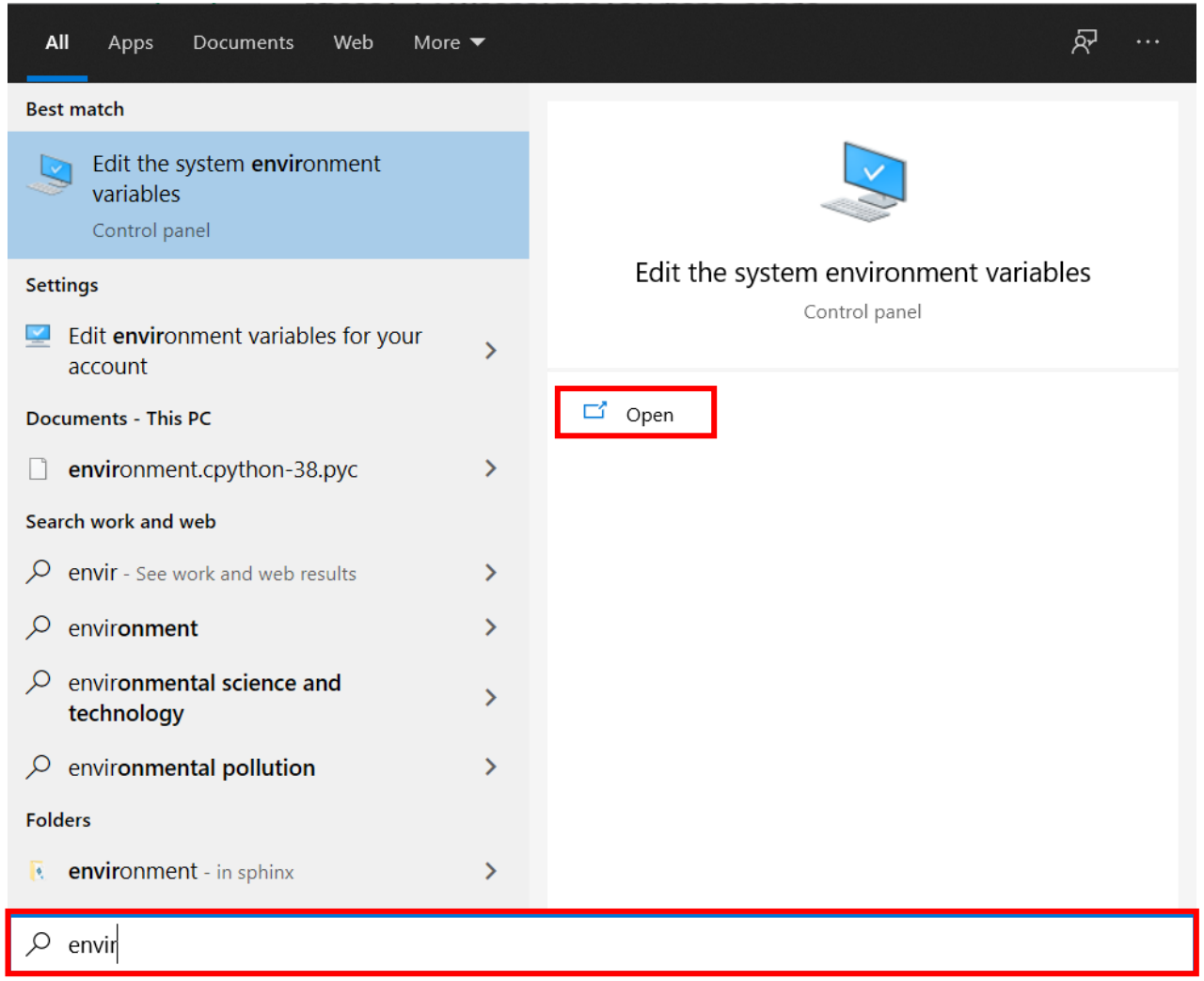
If you get an output similar to this image, Anaconda have not been added into your PATH.

If you get an output similar to this image, Anaconda have already been added into your PATH.



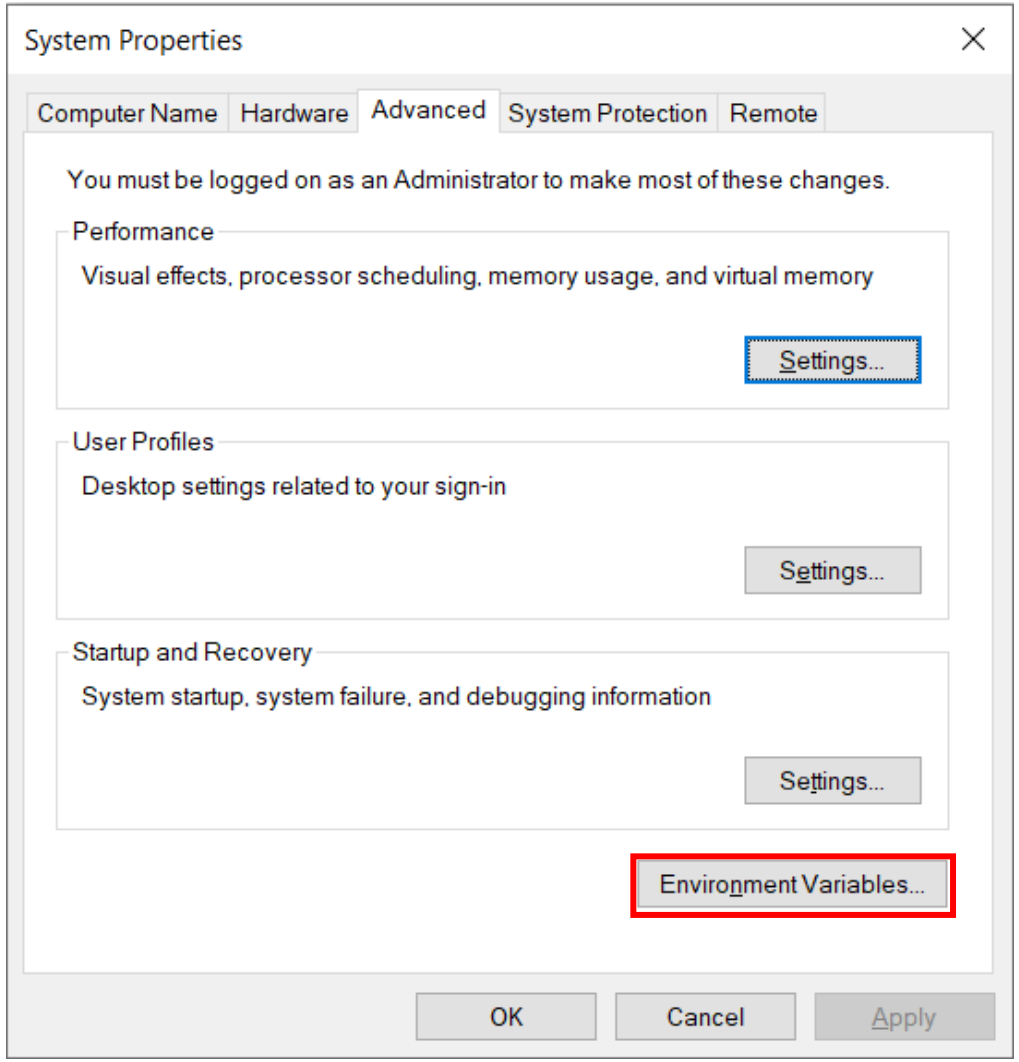
4. Add Anaconda3 into your PATH environment variable (optional)

Press Win+Q and search “Edit the system environment variables”.



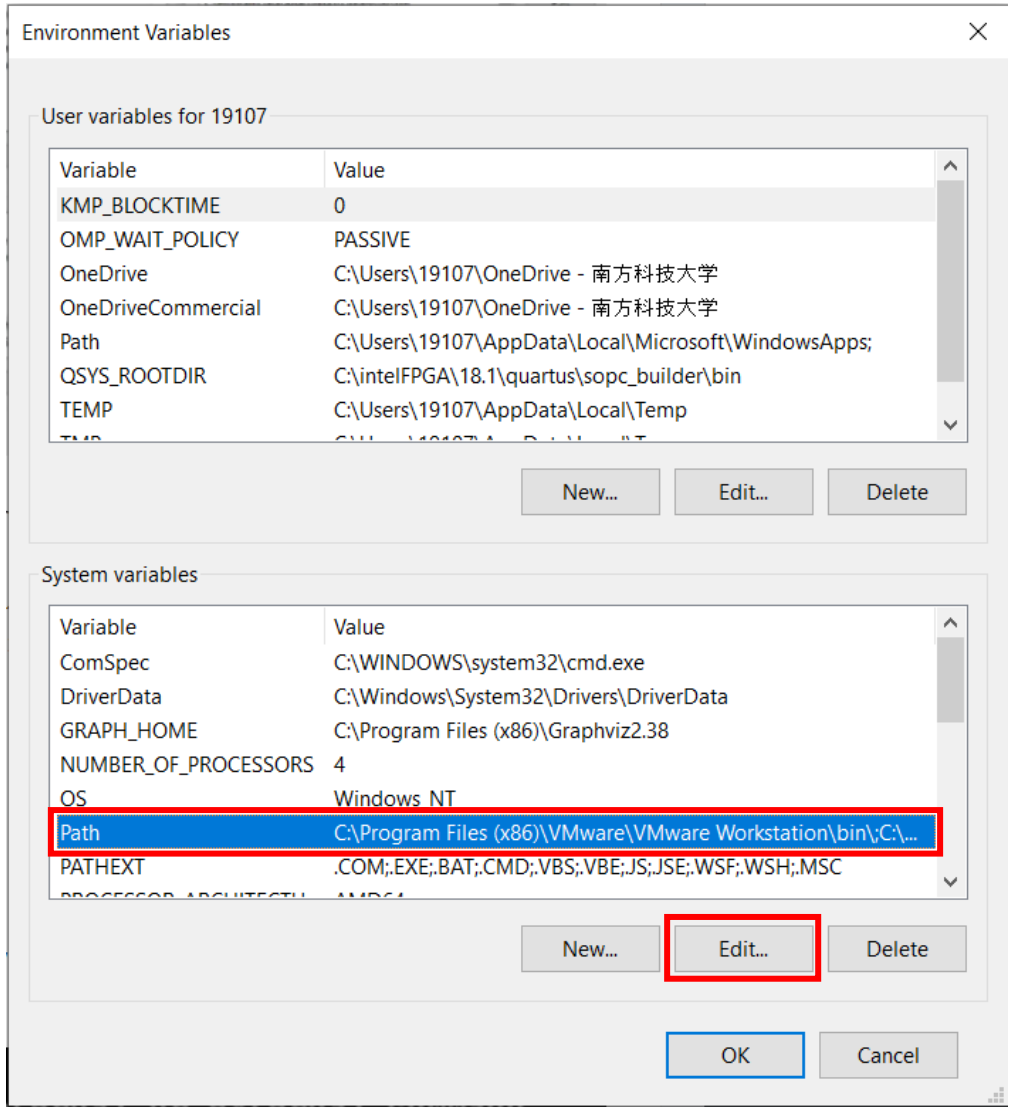
4. Add Anaconda3 into your PATH environment variable (optional)

Click the “Environment Variables…” button.



4. Add Anaconda3 into your PATH environment variable (optional)

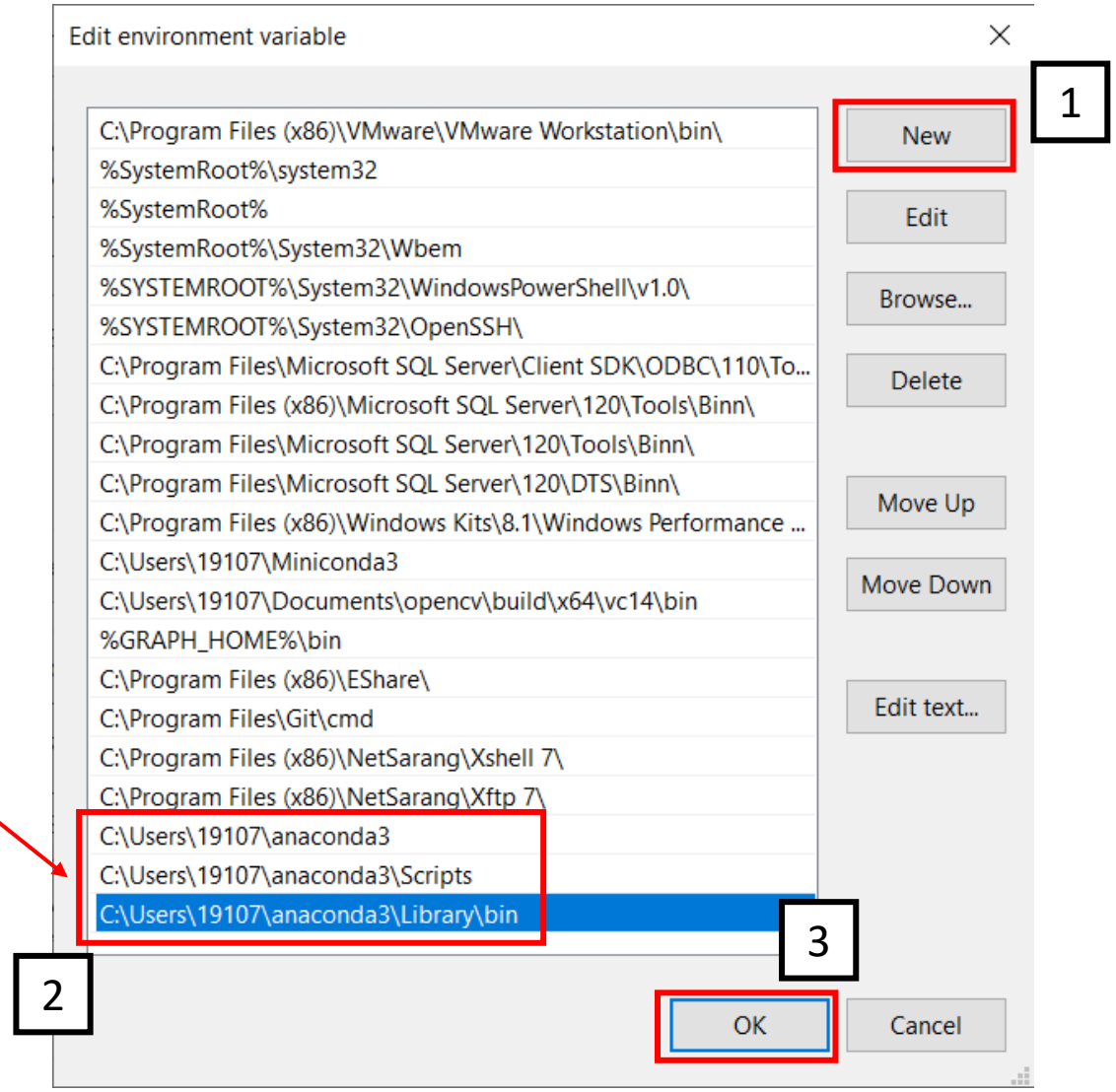
Find the Path environment variable and press edit.



4. Add Anaconda3 into your PATH environment variable (optional)

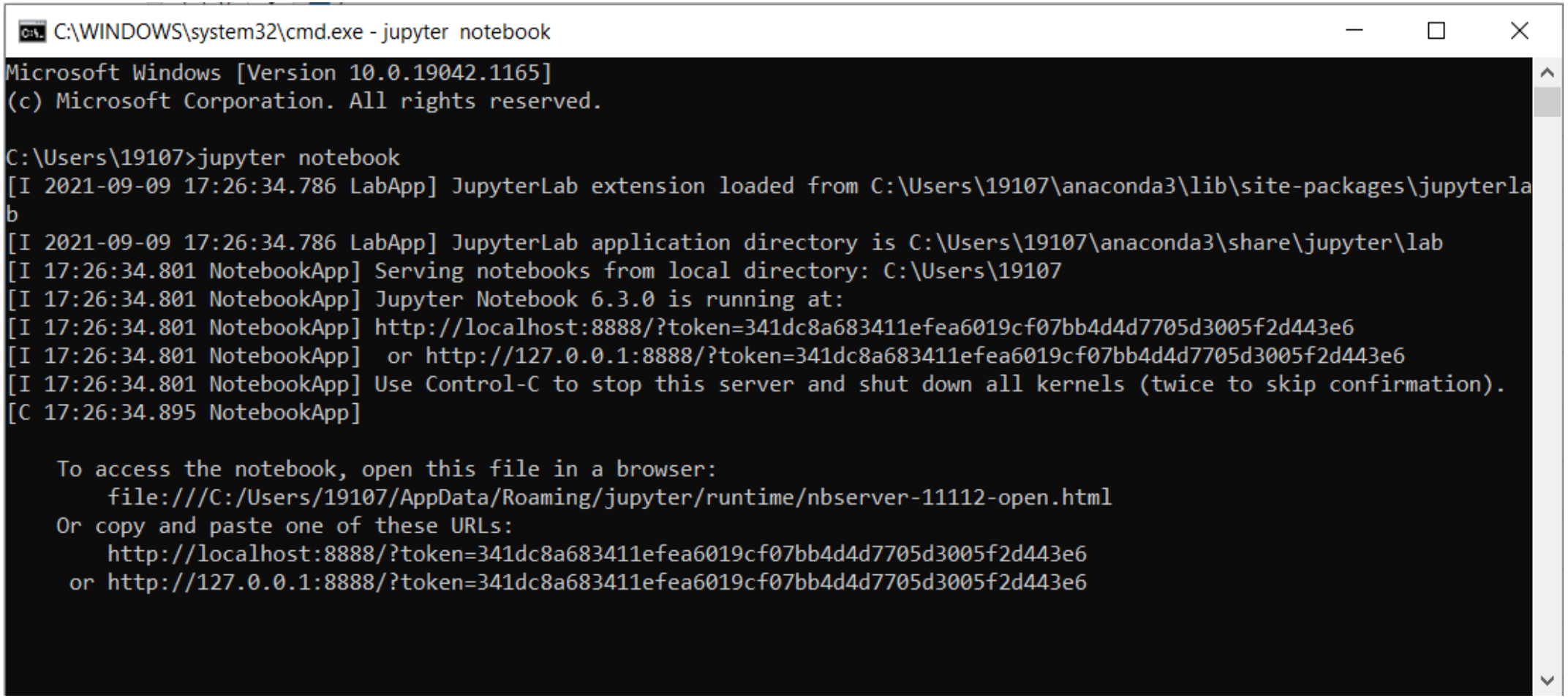
Press New to add new environment variable and press OK.

These are the new environment variables be added into PATH and “C:\Users\19107\anaconda3” depends on the destination folder of your anaconda.



4. Add Anaconda3 into your PATH environment variable (optional)

Input “jupyter notebook” and press Enter. If you get an output similar to the image below, Anaconda have been added into your PATH successfully.



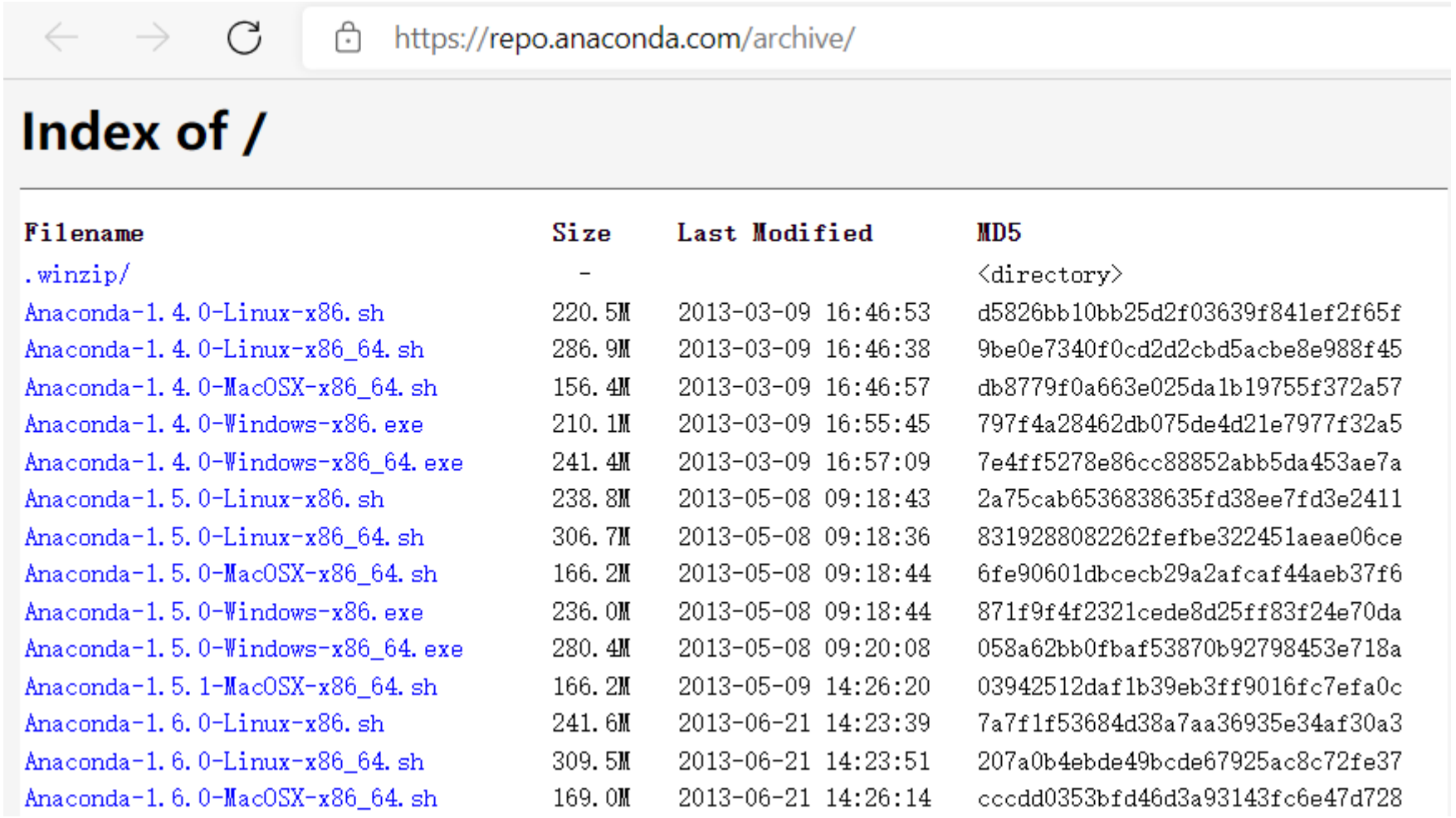
Installation guide for Linux user

1. Download Anaconda Installer

You can find the anaconda installer you want in there [Anaconda | Individual Edition](https://www.anaconda.com/products/individual-d).

1. Download Anaconda Installer

You can also find more additional installers in [Index of / (anaconda.com)](https://repo.anaconda.com/archive/).



2. Install Anaconda

Use “chmod +x” to give the installer execution permission and use “bash” to execute it. Then press Enter to continue.

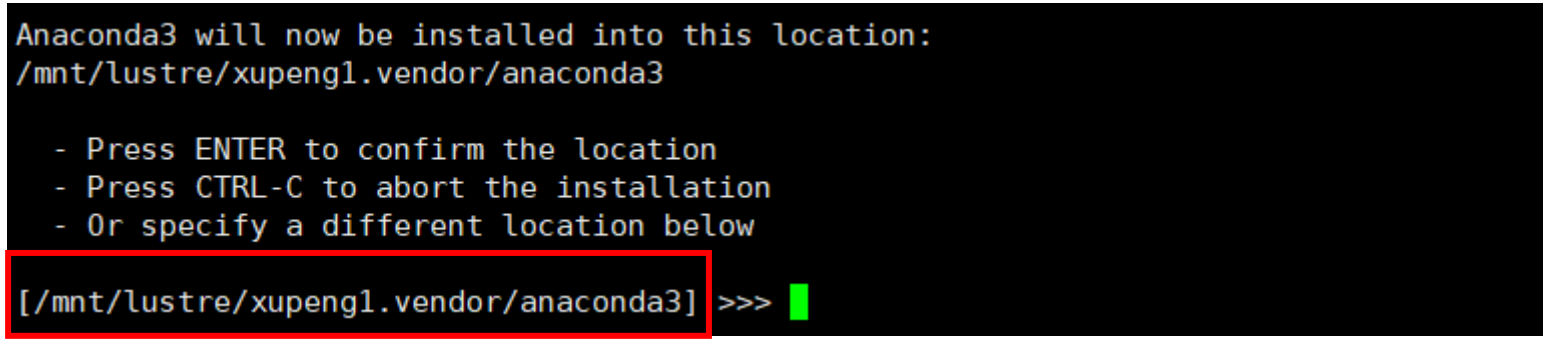
```
[xupeng1.vendor@SH-IDC2-172-20-20-21 ~]$ chmod +x Anaconda3-2021.05-Linux-x86_64.sh
[xupeng1.vendor@SH-IDC2-172-20-20-21 ~]$ bash Anaconda3-2021.05-Linux-x86_64.sh

Welcome to Anaconda3 2021.05

In order to continue the installation process, please review the license
agreement.
Please, press ENTER to continue
>>>
```

Read the license terms and input “yes” to accept it.

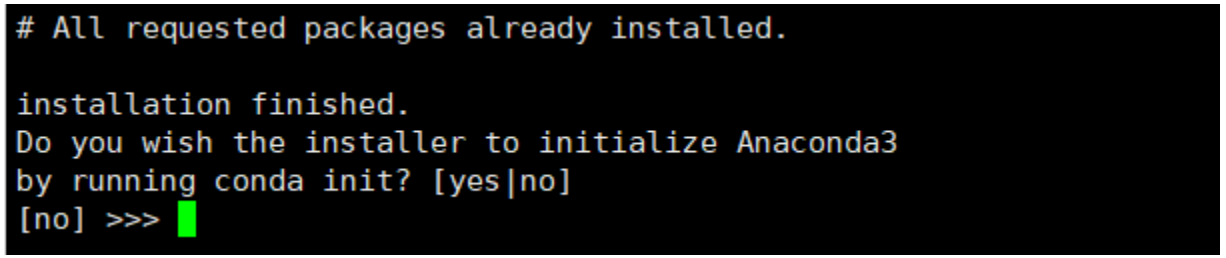
```
Export; Cryptography Notice
===========================

You must comply with all domestic and international export laws and regulations that apply to the software, which in
dividual Edition includes cryptographic software. The country in which you currently reside may have restrictions on
ncryption software. BEFORE using any encryption software, please check your country's laws, regulations and policies
 software, to see if this is permitted. See the Wassenaar Arrangement http://www.wassenaar.org/ for more information

Anaconda has self-classified this software as Export Commodity Control Number (ECCN) 5D992.c, which includes mass ma
nctions with asymmetric algorithms. No license is required for export of this software to non-embargoed countries.

The Intel Math Kernel Library contained in Anaconda Individual Edition is classified by Intel as ECCN 5D992.c with n

The following packages listed on https://www.anaconda.com/cryptography are included in the repository accessible thr

Last updated April 5, 2021

Do you accept the license terms? [yes|no]
[no] >>>
```

2. Install Anaconda

Anaconda will provide you a default destination location and you can change it by providing a new one. Then press Enter to continue.

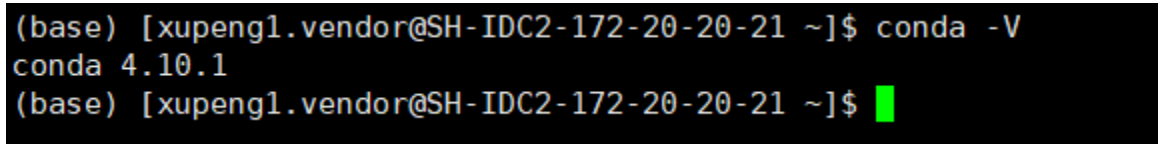


Input yes to initialize your anaconda.



3. Check your installation

Open another shell prompt. If you find there is a “(base)” in your shell prompt and the output of “conda -V” is similar to the image below, congratulations on your successfully installation.



Simple guidelines for the use of Anaconda

More useful information in Conda — Conda documentation

1. Create virtual environment

Use “conda create –n your_env_name python=X.X” to create a virtual environment with the python version of X.X and the environment will be named as your_env_name.

```
(base) C:\Users\19107>conda create -n Test python=3.6
```

In Windows

```
(base) [xupeng1.vendor@SH-IDC2-172-20-20-21 ~]$ conda create -n Test python=3.6
```

In Linux

You can also install some additional packages while creating a virtual environment.
The command is “conda create –n your_env_name additional_packages python=X.X”

```
(base) C:\Users\19107>conda create -n Test opencv-python python=3.6
```

In Windows

```
(base) [xupeng1.vendor@SH-IDC2-172-20-20-21 ~]$ conda create -n Test opencv-python python=3.6
```

In Linux

2. Check environments

Through the part 1, we can find that the specific command to use anaconda is the same in both Windows and Linux.
Use “conda env list” to check the list anaconda virtual environments.

```
(base) C:\Users\19107>conda env list
# conda environments:
#
base                  *  C:\Users\19107\anaconda3
Test                     C:\Users\19107\anaconda3\envs\Test
```

Use “pip list” to check the packages installed in the virtual environment.

```
(base) C:\Users\19107>pip list
Package                           Version
--------------------------------- -------------------
alabaster                         0.7.12
anaconda-client                   1.7.2
anaconda-navigator                2.0.3
anaconda-project                  0.9.1
anyio                             2.2.0
appdirs                           1.4.4
argh                              0.26.2
argon2-cffi                       20.1.0
asn1crypto                        1.4.0
astroid                           2.5
astropy                           4.2.1
```

3. Use virtual environment

Use “conda activate your_env_name” to activate the virtual environment.

```
(base) C:\Users\19107>conda activate Test

(Test) C:\Users\19107>
```

Use “conda deactivate” to deactivate the virtual environment.

```
(Test) C:\Users\19107>conda deactivate

(base) C:\Users\19107>
```

Use “conda remove –n your_env_name --all” to delete the virtual environment.

```
(base) C:\Users\19107>conda remove -n Test --all

Remove all packages in environment C:\Users\19107\anaconda3\envs\Test:

No packages found in C:\Users\19107\anaconda3\envs\Test. Continuing environment removal

(base) C:\Users\19107>
```