

# Hexaton Class : Ananconda & 가상환경 설정 (win)

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# Anaconda

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Individual Edition

## Your data science toolkit

With over 20 million users worldwide, the open-source Individual Edition (Distribution) is the easiest way to perform Python/R data science and machine learning on a single machine. Developed for solo practitioners, it is the toolkit that equips you to work with thousands of open-source packages and libraries.

- [Ananconda 다운로드, 아래 링크로 들어가기](#)
- <https://www.anaconda.com/products/individual>

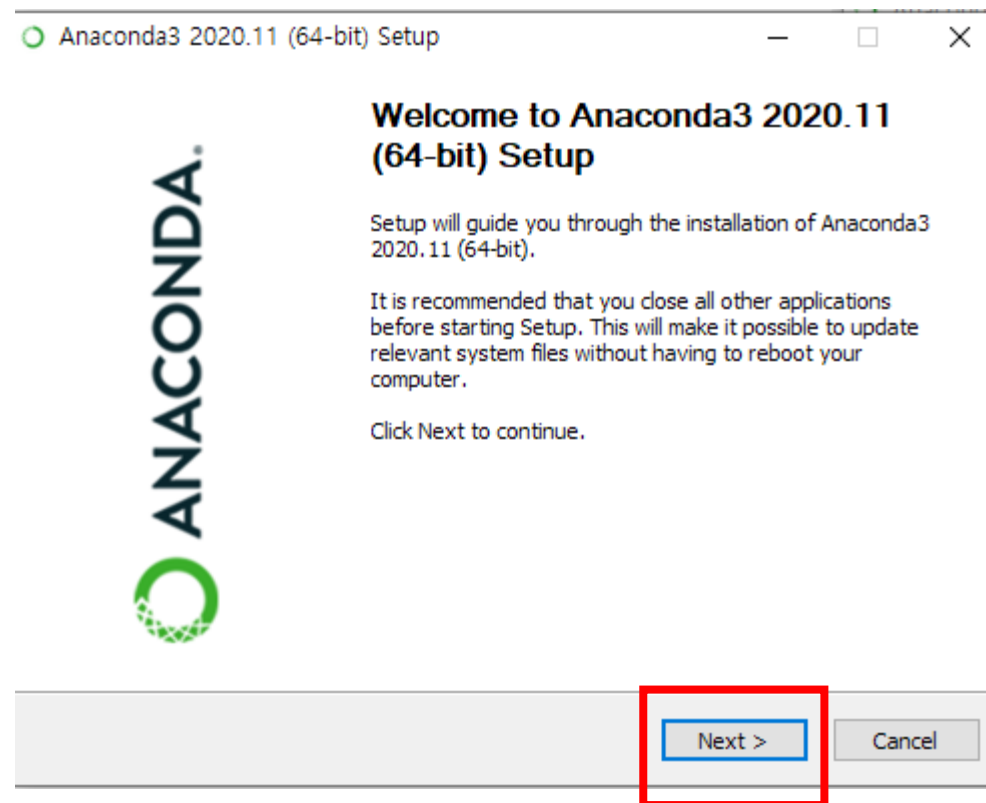
# Anaconda

Anaconda Installers

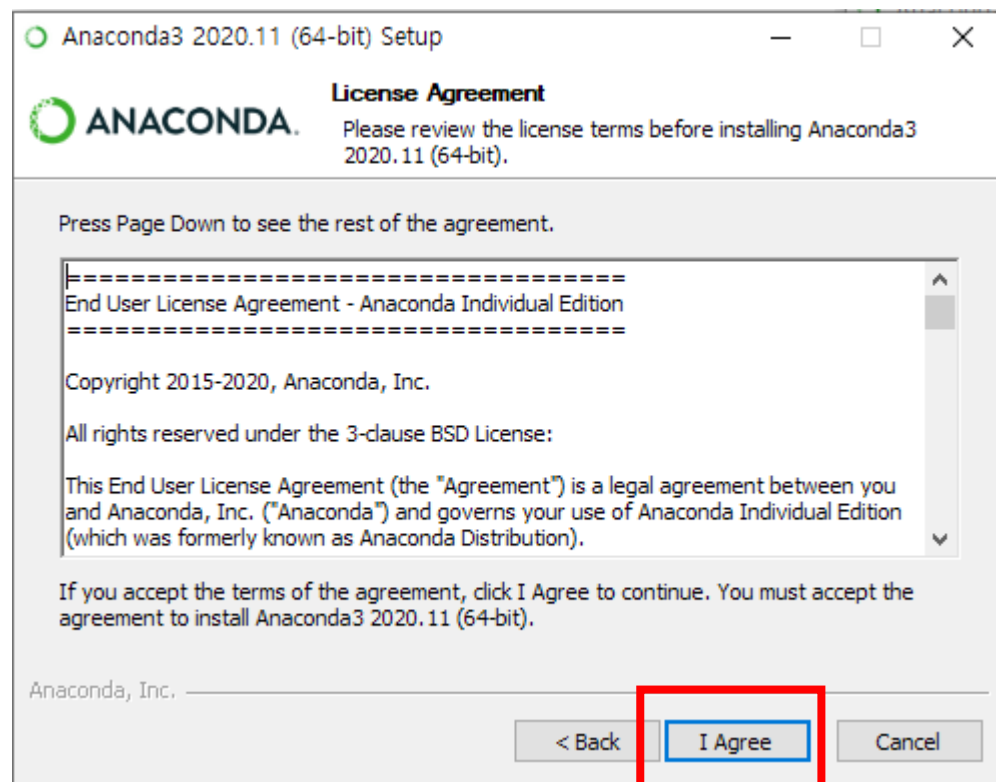
Windows 	MacOS 	Linux 
<div style="border: 2px solid red; padding: 5px; margin-bottom: 5px;">           Python 3.8            64-Bit Graphical Installer (457 MB)         </div> 32-Bit Graphical Installer (403 MB)	Python 3.8 64-Bit Graphical Installer (435 MB)  64-Bit Command Line Installer (428 MB)	Python 3.8 64-Bit (x86) Installer (529 MB)  64-Bit (Power8 and Power9) Installer (279 MB)

- 64-bit installer 클릭해서 다운로드 받기

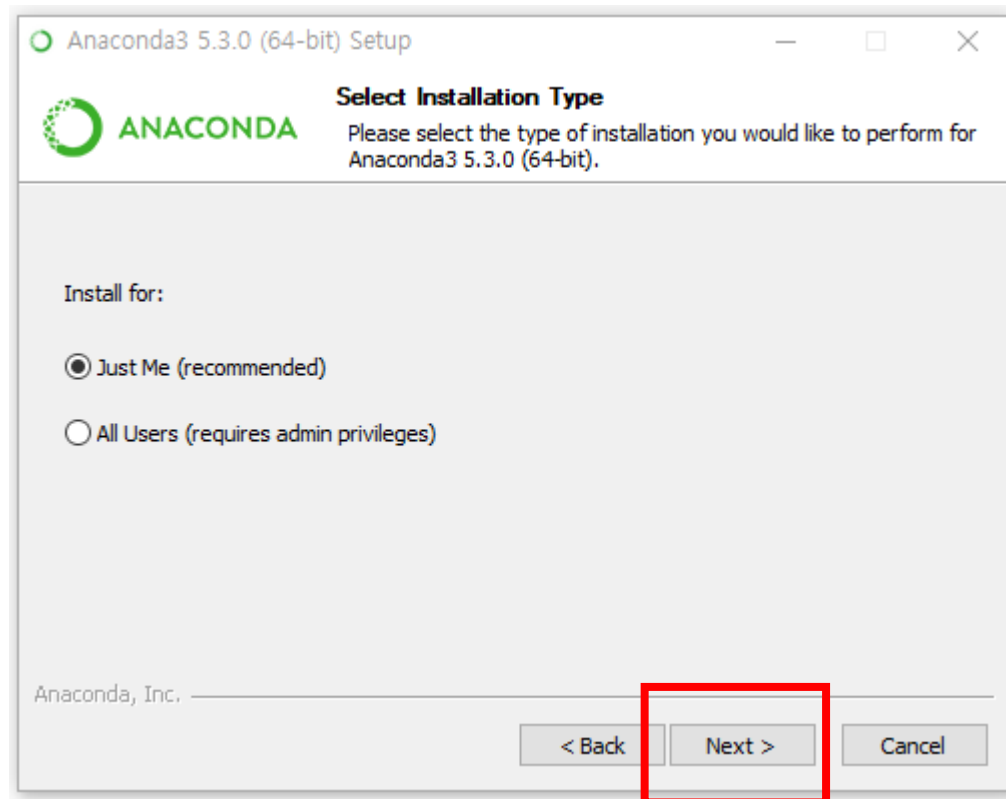
# Anaconda



# Anaconda

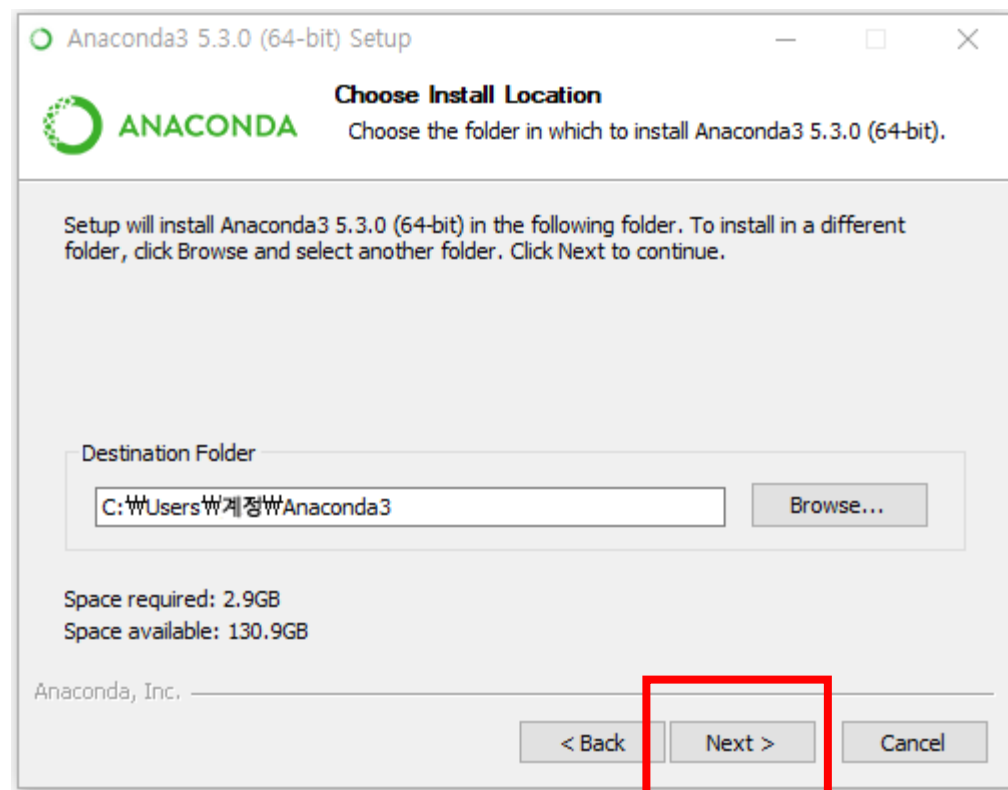


# Anaconda



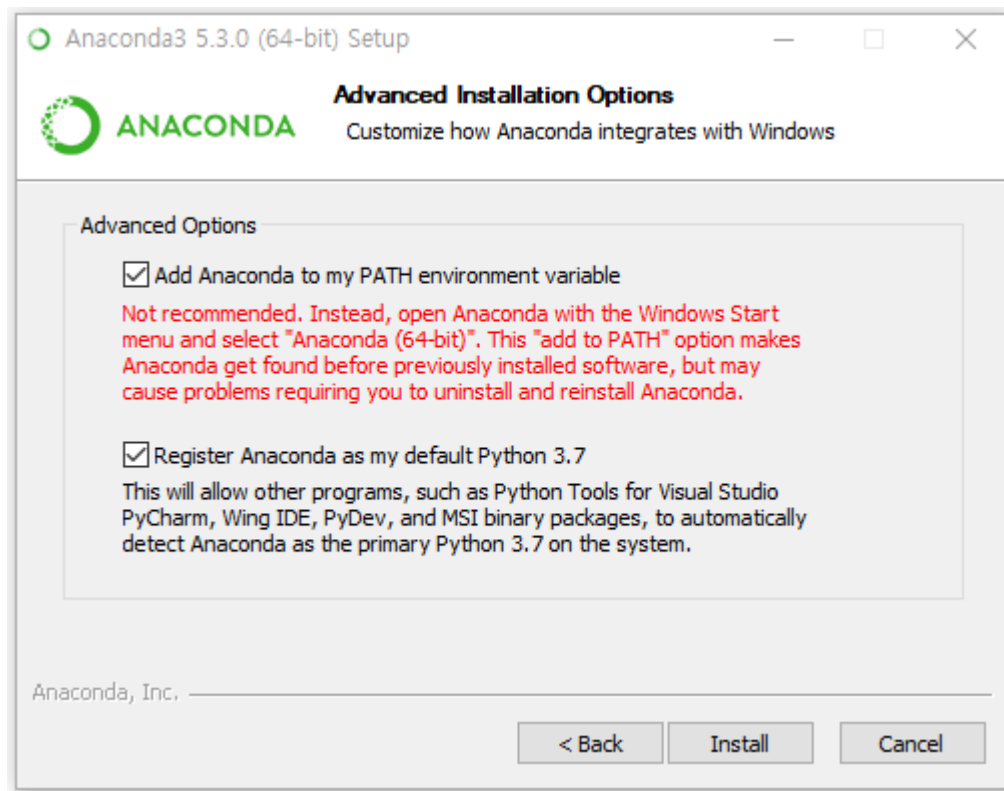
- Just Me 클릭하기

# Anaconda



- 계정은 여러분들의 컴퓨터 이름일 겁니다!
- 이 때, 자기 컴퓨터가 한글이름이라면 바로 바꿔주세요. 나중에 무조건 에러납니다. 무조건 바꾸세요!!!!

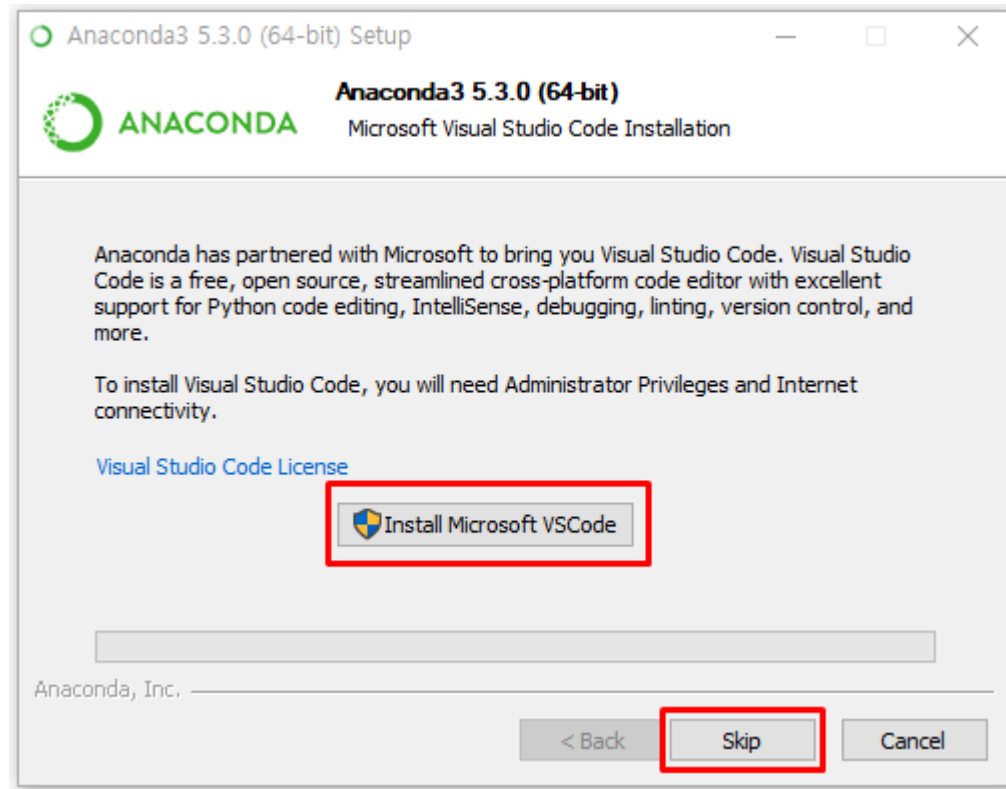
# Anaconda



- 위의 그림처럼 옵션 모두 선택해주세요!

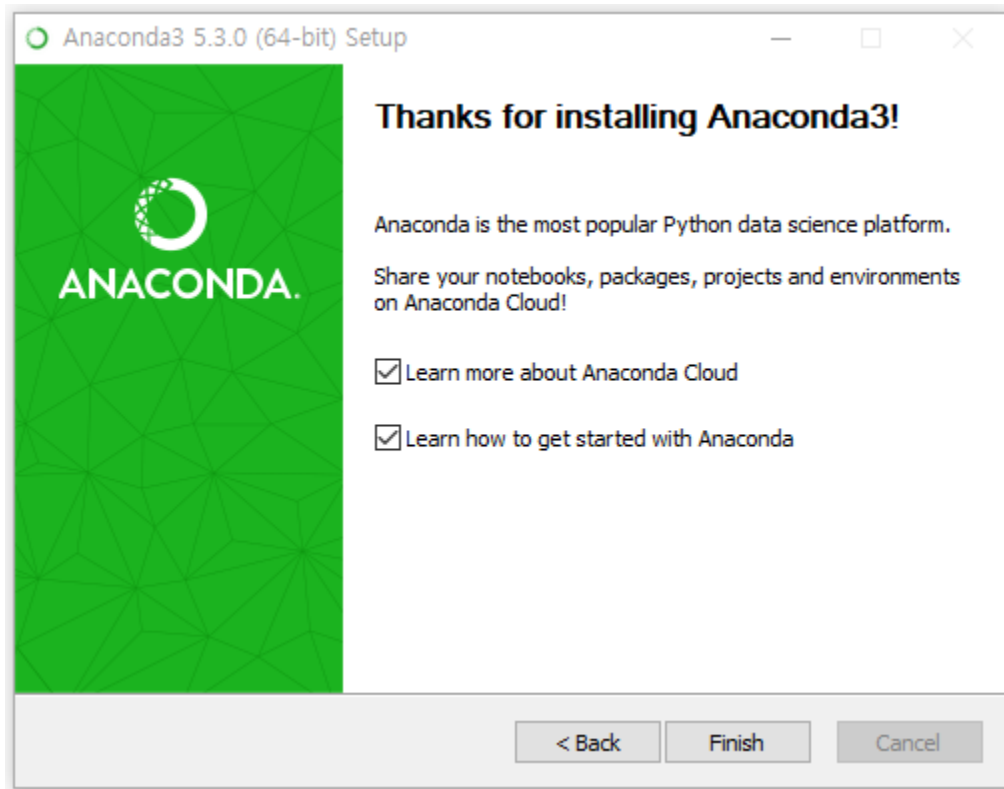


# Anaconda



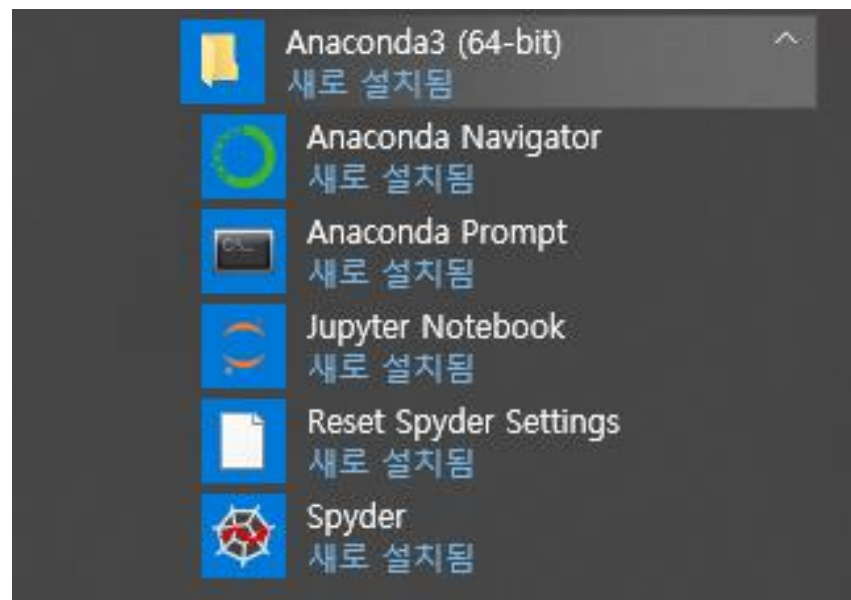
- 여러분들의 VSCode 가 안 깔려있다면 Install Microsoft VSCode 클릭해서 install 하시면 됩니다.
- 만약 미리 깔려있다면 Skip을 누르시면 됩니다.

# Anaconda



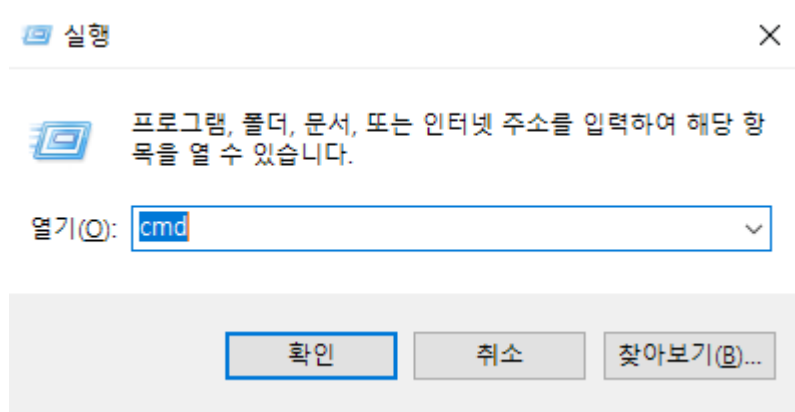
- 완성!!!

# Anaconda



- 윈도우 시작 메뉴에서 설치된 것을 확인해주세요!!

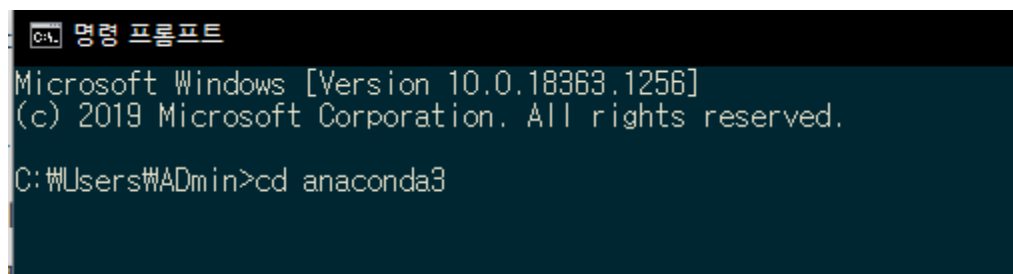
# Anaconda



```
C:\Users\ADmin>python --version
```

- Win + R 을 누르시고 cmd를 입력 후 enter
- python --version 명령어를 입력하고 python version 명령어 입력해서 python 3.8.x 가 나오는 것을 확인해주세요!

# Anaconda 가상환경 설정



```
명령 프롬프트
Microsoft Windows [Version 10.0.18363.1256]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\WAdmin>cd anaconda3
```

- Cmd 창에서 cd anaconda3 입력 후 enter

# Anaconda 가상환경 설정

```
C:\Users\WAdmin\anaconda3>conda create -n sample
Collecting package metadata (current_repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
  current version: 4.8.3
  latest version: 4.9.2

Please update conda by running

    $ conda update -n base -c defaults conda

## Package Plan ##

  environment location: C:\Users\WAdmin\anaconda3\envs\sample

Proceed ([y]/n)?
```

- conda create -n {여러분들의 가상환경 이름, ex) hexaton-1} 입력
- 저는 sample로 했습니다. (이 슬라이드 이후로 {} 표시는 여러분의 가상환경을 의미합니다. 명령어에 {} 앞으로 빼고 치세요!!!! 제발)
- Proceed ([y] / n)? 명령어가 뜨면 Enter

# Anaconda 가상환경 설정

```
C:\Users\Admin\anaconda3>conda env list
# conda environments:
#
base                  *  C:\Users\Admin\anaconda3
classpage             C:\Users\Admin\anaconda3\envs\classpage
ml                    C:\Users\Admin\anaconda3\envs\ml
sample                C:\Users\Admin\anaconda3\envs\sample
tensorflow             C:\Users\Admin\anaconda3\envs\tensorflow
text                  C:\Users\Admin\anaconda3\envs\text
web                   C:\Users\Admin\anaconda3\envs\web
```

- conda env list 명령어 입력
- 아마 여러분들의 가상환경 목록이 나타날 겁니다. Base와 여러분들의 가상환경 이름이 났다면 끝!!

# Anaconda 가상환경 설정

과제!!! (캡처하기)

```
C:\Users\ADmin\Anaconda3>conda activate sample
(sample) C:\Users\ADmin\Anaconda3>
(sample) C:\Users\ADmin\Anaconda3>conda deactivate
C:\Users\ADmin\Anaconda3>
```

- conda activate {가상환경 이름} 명령어 입력
- (가상환경 이름) 하고 command가 바뀌었을 겁니다. 그럼 가상환경이 동작하고 있다는 증거!! 가상환경 활성화 끝!
- 가상환경 비활성화는 conda deactivate 하면 가상환경 끝낸 것



# Anaconda jupyter notebook

```
(sample) C:\Users\ADmin\anaconda3>cd envs
(sample) C:\Users\ADmin\anaconda3\envs>cd sample
(sample) C:\Users\ADmin\anaconda3\envs\sample>conda install jupyter
Collecting package metadata (current_repodata.json): done
Solving environment: failed with initial frozen solve. Retrying with flexible solve.
Solving environment: failed with repodata from current_repodata.json, will retry with next repodata source.
Collecting package metadata (repodata.json): done
Solving environment: done
```

- 다시 conda activate {가상환경 이름}
- cd envs → cd {가상환경 이름} → conda install jupyter

# Anaconda jupyter notebook

```
six pkgs/main/win-64::six-1.15.0-py39h95532_0
sqlite pkgs/main/win-64::sqlite-3.33.0-h2a8f88b_0
terminado pkgs/main/win-64::terminado-0.9.1-py39h95532_0
testpath pkgs/main/noarch::testpath-0.4.4-py_0
tornado pkgs/main/win-64::tornado-6.1-py39h2bbff1b_0
traitlets pkgs/main/noarch::traitlets-5.0.5-py_0
tzdata pkgs/main/noarch::tzdata-2020d-h14c3975_0
vc pkgs/main/win-64::vc-14.2-h21ff451_1
vs2015_runtime pkgs/main/win-64::vs2015_runtime-14.27.29016-h5e58377_2
wcwidth pkgs/main/noarch::wcwidth-0.2.5-py_0
webencodings pkgs/main/win-64::webencodings-0.5.1-py39h95532_1
wheel pkgs/main/noarch::wheel-0.36.2-pyhd3eb1b0_0
widgetsnbextension pkgs/main/win-64::widgetsnbextension-3.5.1-py39h95532_0
wincertstore pkgs/main/win-64::wincertstore-0.2-py39h2bbff1b_0
winpty pkgs/main/win-64::winpty-0.4.3-4
zeromq pkgs/main/win-64::zeromq-4.3.3-ha925a31_3
zipp pkgs/main/noarch::zipp-3.4.0-pyhd3eb1b0_0
zlib pkgs/main/win-64::zlib-1.2.11-h62dcd97_4

Proceed ([y]/n)?
```

done

(sample) C:\Users\Admin\Anaconda3\envs\sample>

- 조금 기다리면 아마 엄청나게 많은 command 들이 뜨고 Proceed가 나옵니다. → Enter 누르기!
- Done 이 나오면서 완료되는 것을 확인해주세요!

# Anaconda jupyter notebook

```
(sample) C:\Users\ADmin\Anaconda3\envs\sample>python -m ipykernel install --user --name sample --display-name "Python 3.8 : sample"
Installed kernelspec sample in C:\Users\ADmin\AppData\Roaming\jupyter\kernels\sample
(sample) C:\Users\ADmin\Anaconda3\envs\sample>
```

- Python -m ipykernel install --user --name {가상환경 이름} --display-name "Python 3.8 : {가상환경 이름}"
- 저는 가상환경 이름이 sample이기 때문에 sample로 넣었습니다.

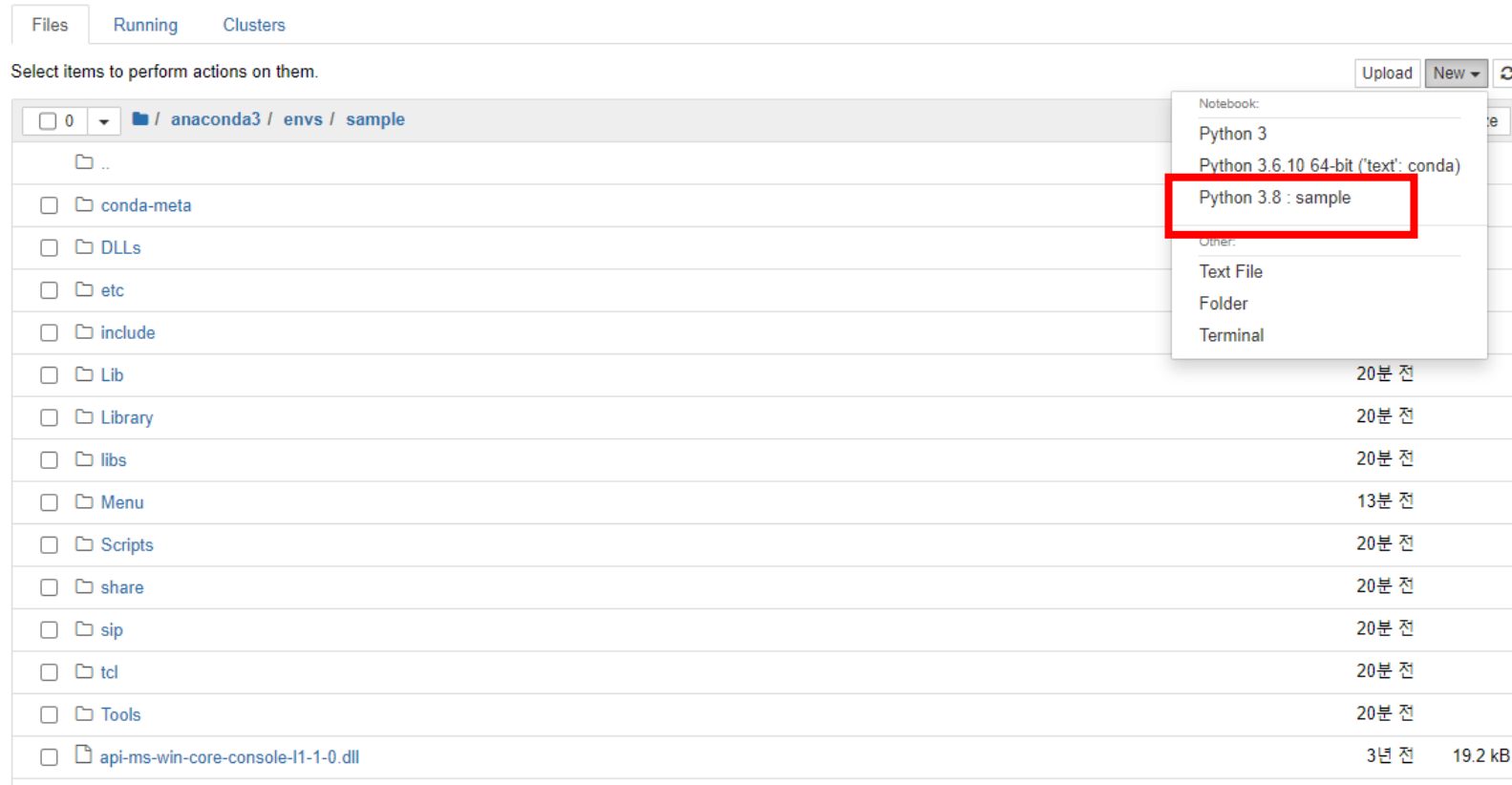
# Anaconda jupyter notebook

```
(sample) C:\Users\ADmin\Anaconda3\envs\sample>jupyter notebook
[I 16:05:46.741 NotebookApp] JupyterLab extension loaded from C:\Users\ADmin\Anaconda3\lib\site-packages\jupyterlab
[I 16:05:46.742 NotebookApp] JupyterLab application directory is C:\Users\ADmin\Anaconda3\share\jupyter\lab
[I 16:05:47.002 NotebookApp] Serving notebooks from local directory: C:\Users\ADmin\Anaconda3\envs\sample
[I 16:06:09.336 NotebookApp] The Jupyter Notebook is running at:
[I 16:06:09.337 NotebookApp] http://localhost:8888/?token=8645424438db4a4b3582dd7d453da3615d1a637a26636383
[I 16:06:09.337 NotebookApp] or http://127.0.0.1:8888/?token=8645424438db4a4b3582dd7d453da3615d1a637a26636383
[I 16:06:09.337 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 16:06:09.435 NotebookApp]

To access the notebook, open this file in a browser:
file:///C:/Users/ADmin/AppData/Roaming/jupyter/runtime/nbserver-190128-open.html
Or copy and paste one of these URLs:
http://localhost:8888/?token=8645424438db4a4b3582dd7d453da3615d1a637a26636383
or http://127.0.0.1:8888/?token=8645424438db4a4b3582dd7d453da3615d1a637a26636383
```

- jupyter notebook 명령어 입력
- 박스 안에 <http://localhost:8888/>~~ 라고 되어있는 부분 복사해서  
크롬 브라우저에 복사 붙여넣기

# Anaconda jupyter notebook



- 완료되면 이런식의 화면이 나오고, New를 눌러보시면 Python 3.8 : { 가상환경 이름} 이 무조건 나와야합니다! 안나오면 안되용

# Anaconda jupyter notebook

Files Running Clusters

Select items to perform actions on them.

Upload New ↻

0 / anaconda3 / envs / sample

..

conda-meta

DLLs

etc

include

Lib

Library

libs

Menu

Scripts

share

sip

tcl

Tools

api-ms-win-core-console-l1-1-0.dll

Python 3

Python 3.6.10 64-bit ('text': conda)

Python 3.8 : sample

Other:

Text File

Folder

Terminal

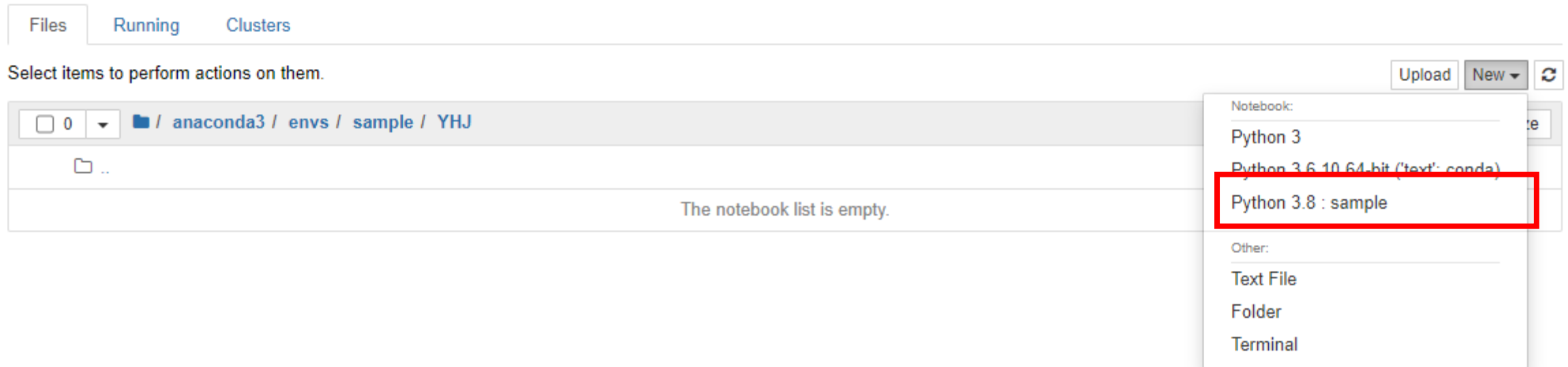
tcl

Tools

YHJ

- New 를 클릭한 후, Folder를 생성한 후
- Untitled Folder 옆에 체크박스를 클릭한 후, rename을 눌러주세요
- 이름은 {자신 이름 이니셜, 유혁준이면 YHJ} 라고 만들어주세요

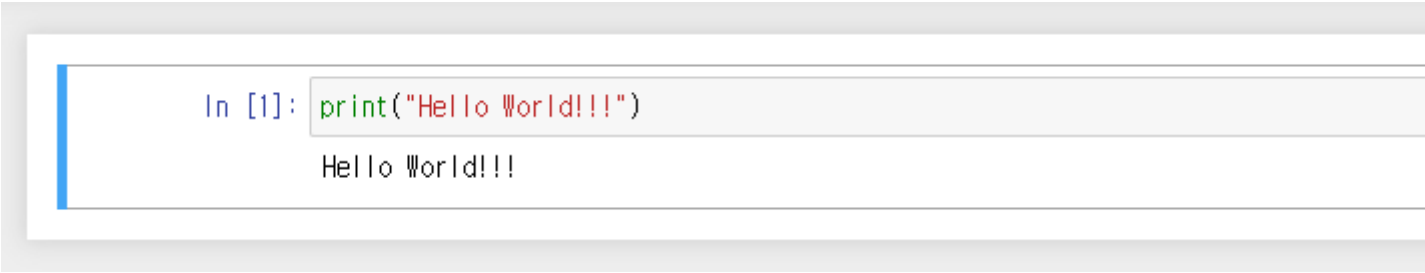
# Anaconda jupyter notebook



- New를 눌러서 Python 3.8 : {가상환경 이름} 을 클릭해주세요!

# Anaconda jupyter notebook

## 과제!!! (캡처하기)



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

- print("Hello World!!!") 입력 후, ctrl+enter
- 출력 나오는 것을 확인한다.