

실습환경 만들기

Anaconda 환경

Anaconda?

- Python 기반의 데이터 분석 오픈소스 플랫폼
- 가상환경 관리자 제공
- 패키지 관리자 제공
- 프로젝트 별 개발 환경 구성 가능

Anaconda?



Anaconda?

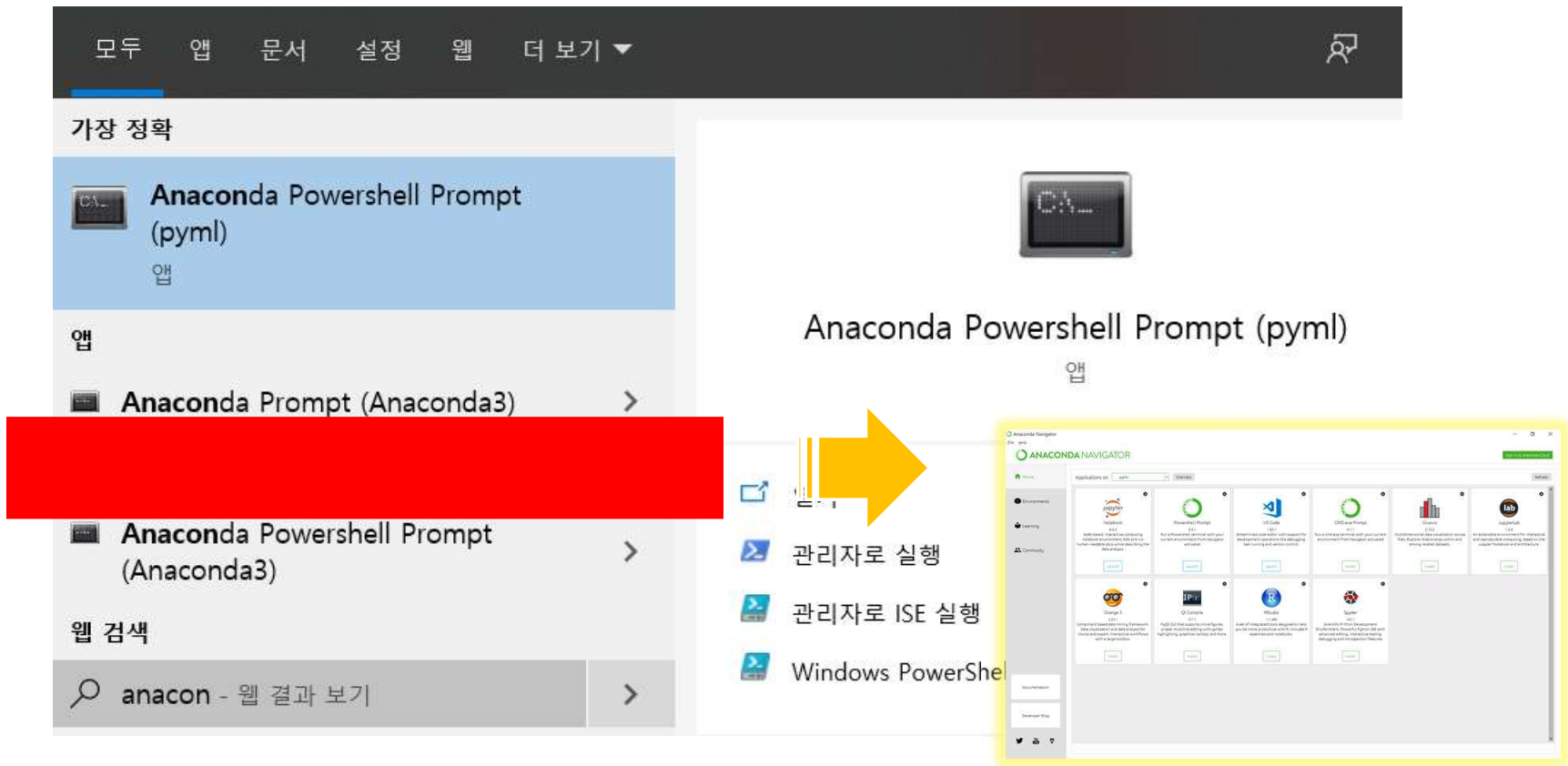
The screenshot shows the Anaconda Navigator application window. On the left sidebar, the 'Environments' tab is selected. A blue box with the text '프로젝트' (Project) has a red arrow pointing to the 'base (root)' environment listed in the 'Environments' panel. A yellow arrow points from the 'base (root)' environment to a blue box containing the text '프로젝트 별 개발환경을 관리' (Manage development environment by project).

프로젝트

프로젝트 별 개발환경을 관리

Name	Description	Version
attrs	Attrs is the python package that will bring back the joy of writing classes by relieving you from the drudgery of implementing object protocols (aka dunder methods).	19.3.0
backcall	Specifications for callback functions passed in to an api	0.1.0
bleach	Easy, whitelist-based html-sanitizing tool	3.1.0
ca-certificates	Certificates for use with other packages.	2020.1.1
certifi	Python package for providing mozilla's ca bundle.	2019.11...
colorama	Cross-platform colored terminal text.	0.4.3
decorator	Better living through python with decorators.	4.4.2
importlib-metadata	A library to access the metadata for a python package	1.5.0
importlib_metadata	A library to access the metadata for a python package	1.5.0
ipykernel	ipython kernel for jupyter	5.1.4
ipython	ipython: productive interactive computing	7.13.0
ipython-genutils	Vestigial utilities from ipython	0.2.0
ipython_genutils	Vestigial utilities from ipython	0.2.0
jedi	An autocompletion tool for python that can be used for text editors.	0.16.0
jinja2	An easy to use stand-alone template engine written in pure python.	2.11.1
jsonschema	An implementation of json schema validation for python	3.2.0
jupyter-client		5.3.4
jupyter-core		4.6.1

Anaconda 사용법



Anaconda 사용법

```
선택 Anaconda Powershell Prompt (pym1)

(base) PS F:\tis\pym1_lesson\pym1\ch01> conda active base

CommandNotFoundError: No command 'conda active'.
Did you mean 'conda activate'?

(base) PS F:\tis\pym1_lesson\pym1\ch01> conda activate pym1
(pym1) PS F:\tis\pym1_lesson\pym1\ch01> python .\1-2_bs-link.py
Traceback (most recent call last):
  File ".\1-2_bs-link.py", line 1, in <module>
    from bs4 import BeautifulSoup
ModuleNotFoundError: No module named 'bs4'
(pym1) PS F:\tis\pym1_lesson\pym1\ch01>
(pym1) PS F:\tis\pym1_lesson\pym1\ch01>
(pym1) PS F:\tis\pym1_lesson\pym1\ch01> pip beautifulsoup4
ERROR: unknown command "beautifulsoup4"
(pym1) PS F:\tis\pym1_lesson\pym1\ch01> pip install beautifulsoup4
Collecting beautifulsoup4
  Downloading beautifulsoup4-4.8.2-py3-none-any.whl (106 kB)
    |████████████████████| 106 kB 104 kB/s
Collecting soupsieve>=1.2
  Downloading soupsieve-2.0-py2.py3-none-any.whl (32 kB)
Installing collected packages: soupsieve, beautifulsoup4
Successfully installed beautifulsoup4-4.8.2 soupsieve-2.0
(pym1) PS F:\tis\pym1_lesson\pym1\ch01>
(pym1) PS F:\tis\pym1_lesson\pym1\ch01>
(pym1) PS F:\tis\pym1_lesson\pym1\ch01> python .\1-2_bs-link.py
naver > http://www.naver.com
daum > http://www.daum.net
(pym1) PS F:\tis\pym1_lesson\pym1\ch01>
```

Anaconda 사용법

- `conda env list` 또는 `conda info --envs`
 - 아나콘다 가상환경 목록 출력
- `conda create -n test python=3.5`
 - Python 3 버전을 사용하는 test 이름의 새로운 가상환경을 생성
- `conda activate test`
 - 가상환경을 사용하기 위해 활성화
- `python --version`
 - 설치되어있는 환경의 python 버전
- `conda install tensorflow-gpu`
 - tensorflow-gpu 패키지 설치
- `conda deactivate`
 - 가상환경 종료, 비활성화
- `conda env remove -n test`
 - 가상환경 삭제

Anaconda 사용법

```
Anaconda Powershell Prompt (pyml)

The following packages will be downloaded:

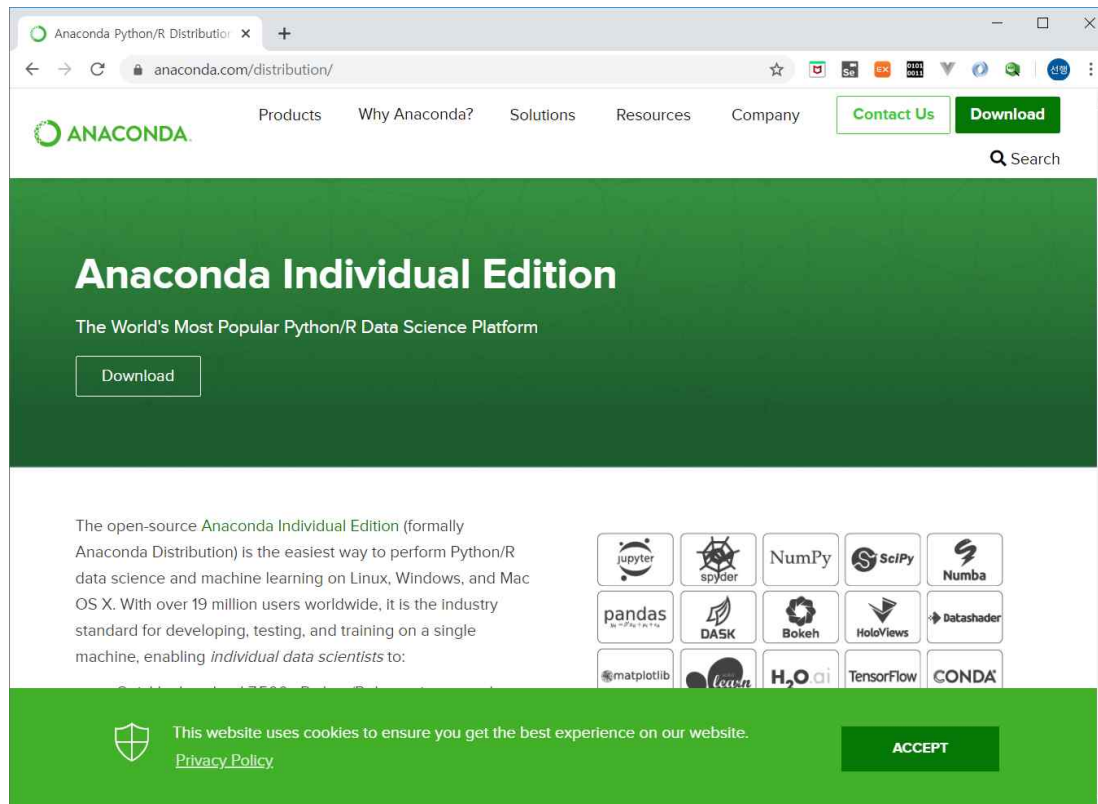
package | build | size
-----|-----|-----
certifi-2019.11.28 | py38_0 | 153 KB
pip-20.0.2 | py38_1 | 1.7 MB
python-3.8.1 | h5fd99cc_8_cpython | 16.0 MB
setuptools-46.0.0 | py38_0 | 529 KB
wheel-0.34.2 | py38_0 | 66 KB
wincertstore-0.2 | py38_0 | 15 KB
Total: 18.4 MB

The following NEW packages will be INSTALLED:

ca-certificates | pkgs/main/win-64::ca-certificates-2020.1.1-0
certifi | pkgs/main/win-64::certifi-2019.11.28-py38_0
openssl | pkgs/main/win-64::openssl-1.1.1e-he774522_0
pip | pkgs/main/win-64::pip-20.0.2-py38_1
python | pkgs/main/win-64::python-3.8.1-h5fd99cc_8_cpython
setuptools | pkgs/main/win-64::setuptools-46.0.0-py38_0
sqlite | pkgs/main/win-64::sqlite-3.31.1-he774522_0
vc | pkgs/main/win-64::vc-14.1-h0510ff6_4
vs2015_runtime | pkgs/main/win-64::vs2015_runtime-14.16.27012-hf0eaf9b_1
wheel | pkgs/main/win-64::wheel-0.34.2-py38_0
wincertstore | pkgs/main/win-64::wincertstore-0.2-py38_0

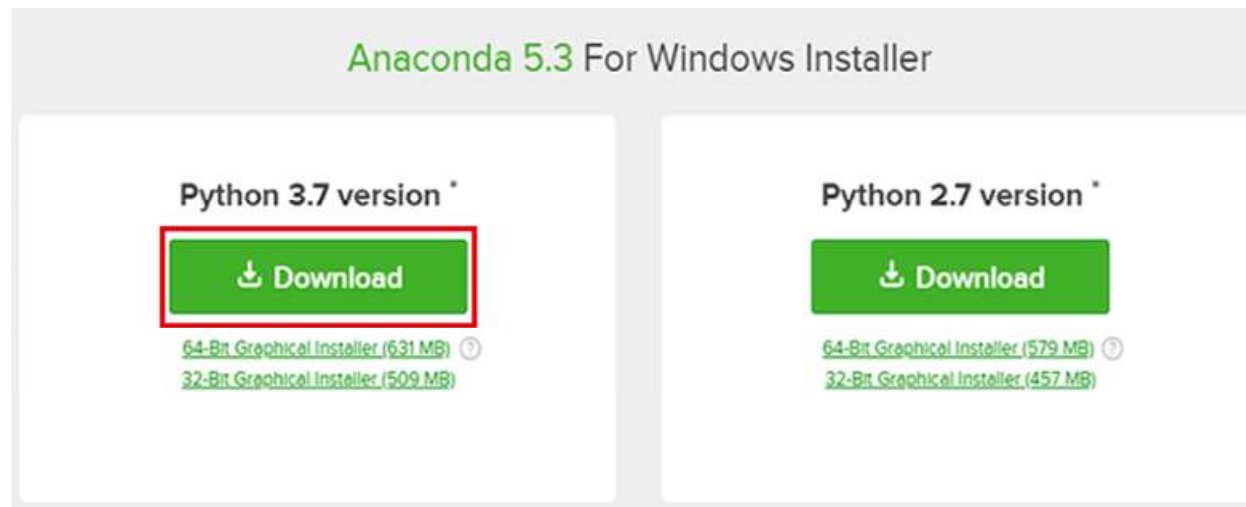
Proceed ([y]/n)?
```


Anaconda 설치



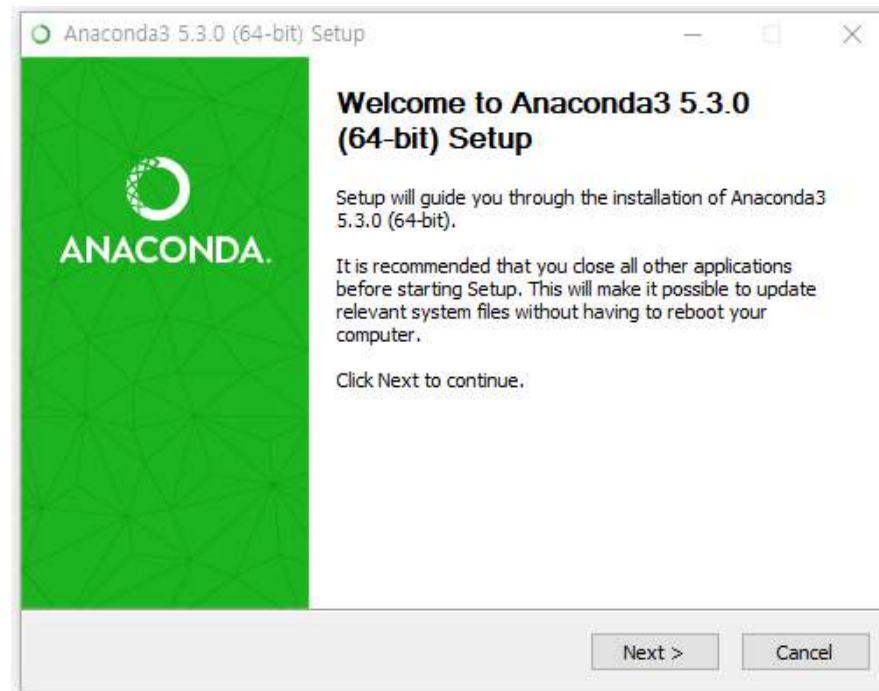
<https://www.anaconda.com/distribution/>

Anaconda 설치

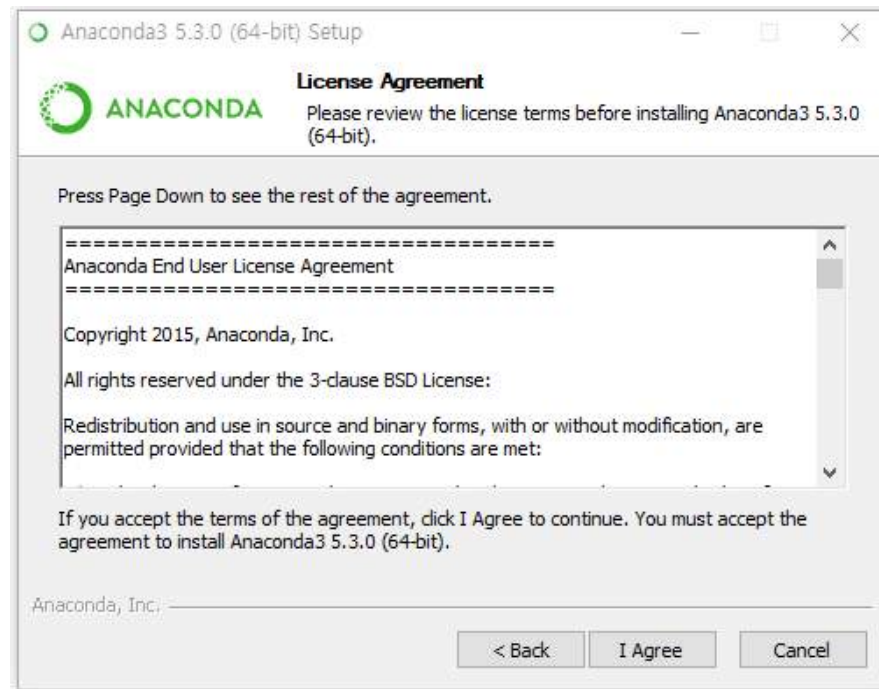


<https://www.anaconda.com/distribution/>

Anaconda 설치



Anaconda 설치

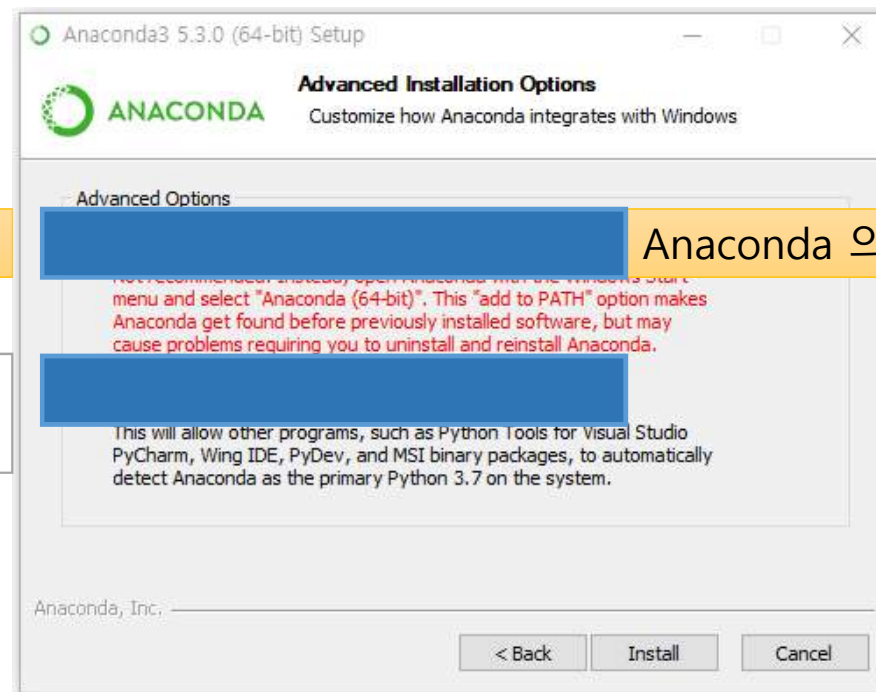


Anaconda 설치

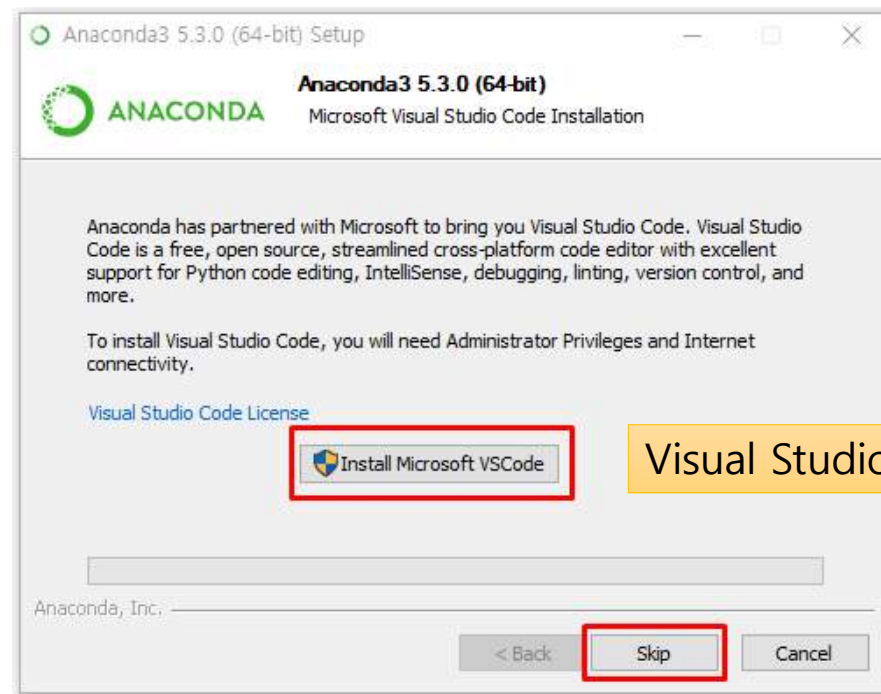
선택 해제

Python3.7을 아나콘다
에서 기본값으로 사용

Anaconda의 path는 추가하지 마세요

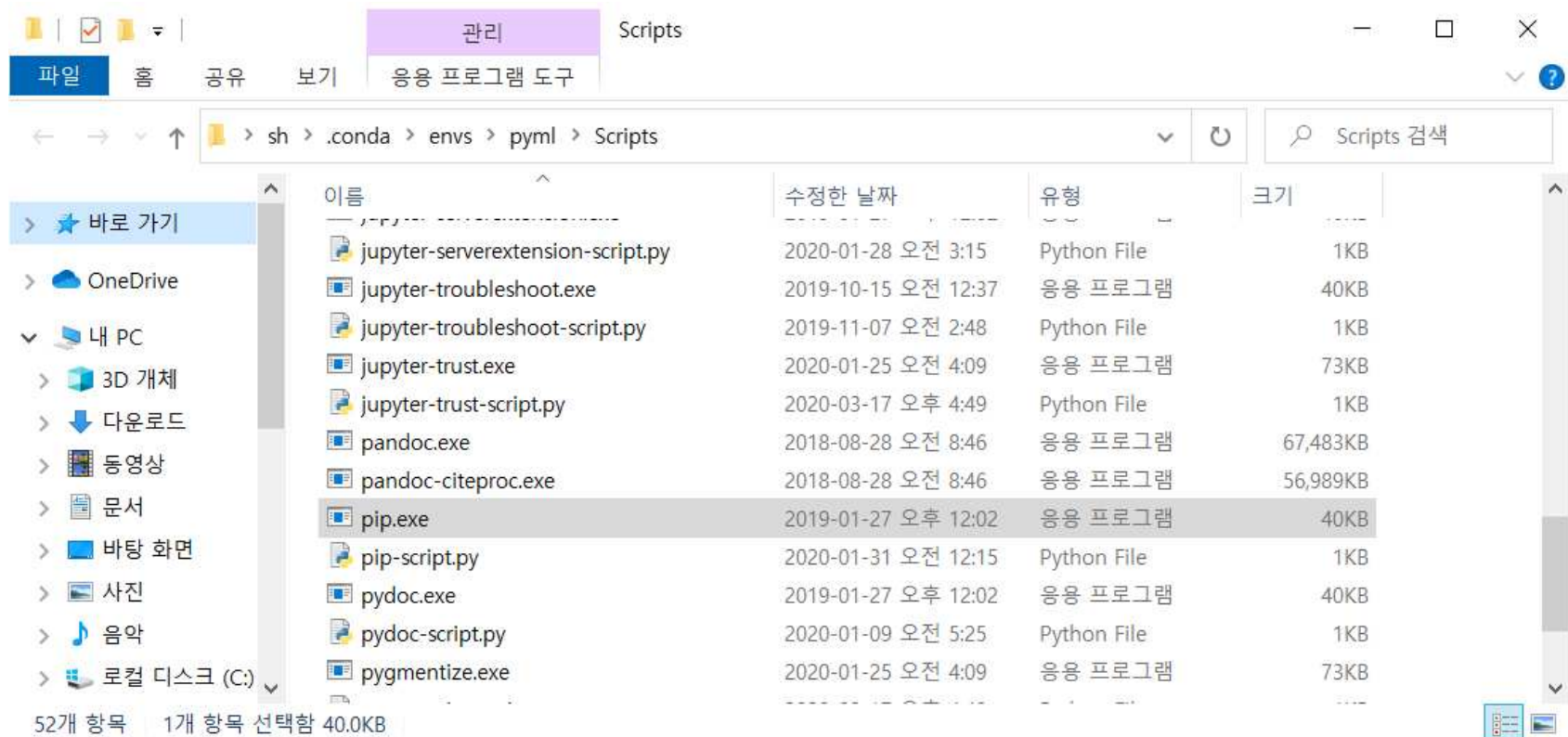


Anaconda 설치

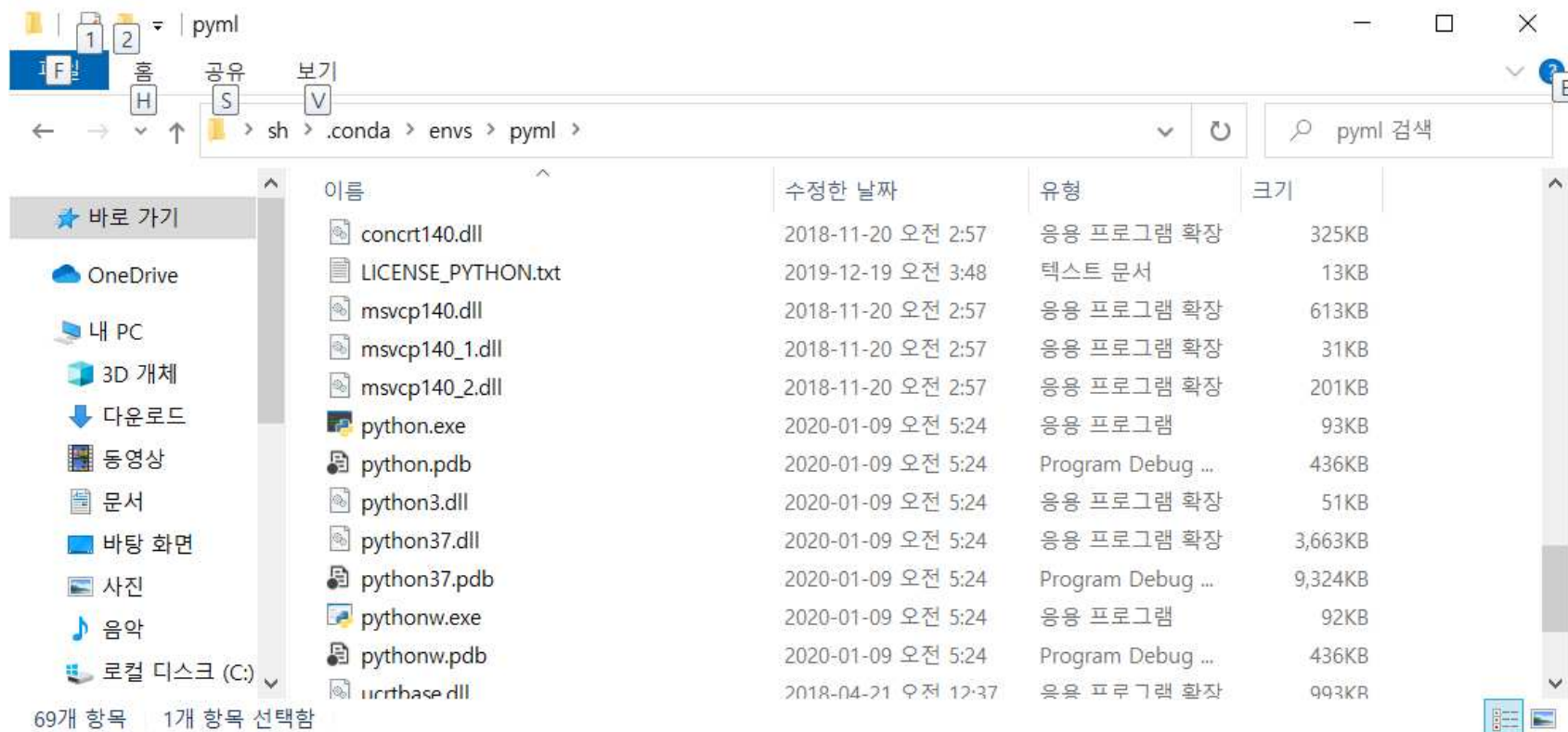


Visual Studio Code 설치

Python 위치



Python 위치



PIP(Python Install Package Manager)

- Python에서 작성된 **패키지 소프트웨어**를 설치하는데 사용

- 명령어

- `python -m pip`
 - command 목록
- `python -m pip install --upgrade pip`
 - 업그레이드
- `python -m pip install numpy`
 - numpy 패키지 설치
- `python -m pip install opencv-python`
 - opencv-python 설치
- `pip uninstall numpy`
 - numpy 패키지 삭제
- `pip list`
 - 설치된 패키지와 버전 출력
- `pip help`
 - 도움말 출력

<https://www.codingfactory.net/11346>

<https://076923.github.io/posts/Python-28/>