파이썬 개발 환경 구축

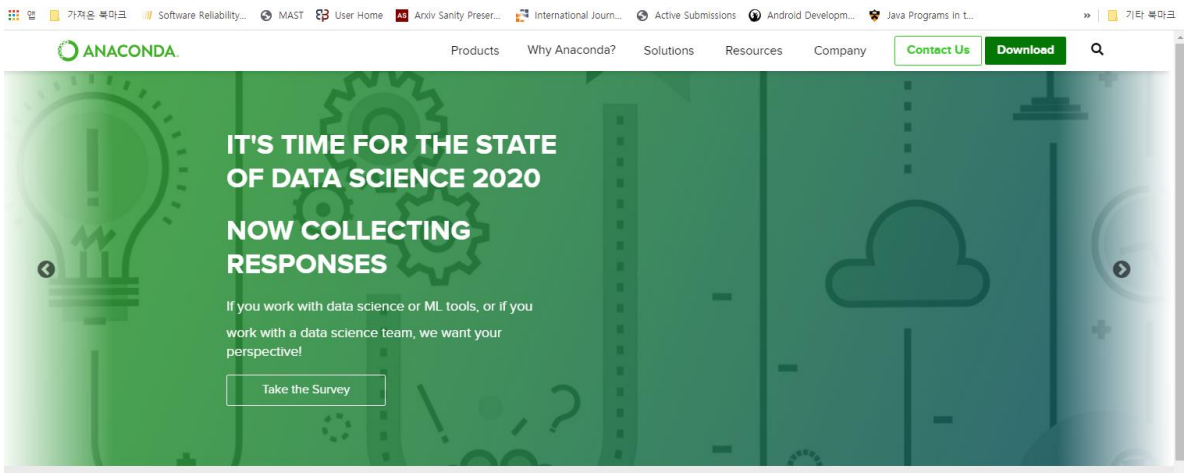
목포해양대학교
해양컴퓨터공학과
김 동 관

목차

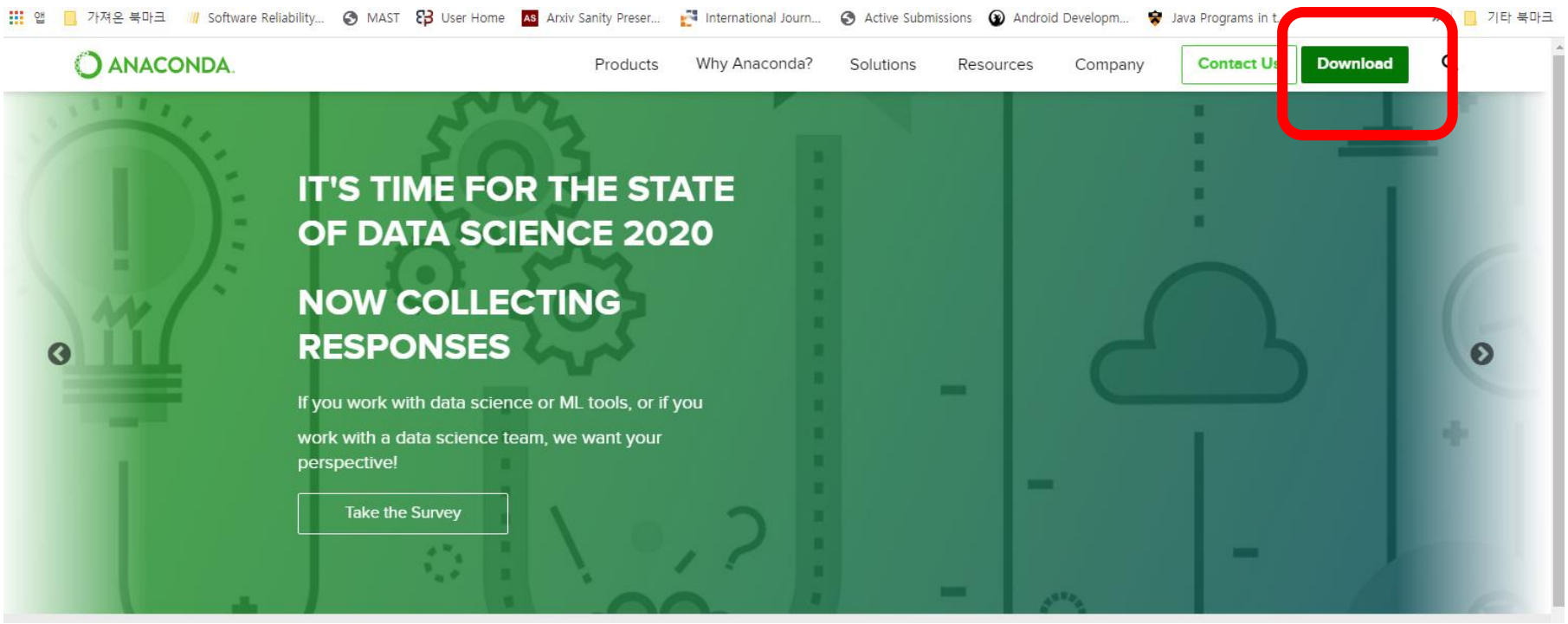
- 아나콘다(Anaconda) 설치
  - 파이썬도 함께 설치됨
- 파이참(PyCharm) 설치
  - 파이썬 편집기 설치

아나콘다

- Python 기반의 데이터 분석에 필요한(각종 수학/과학 라이브러리들) 오픈소스를 모아놓은 개발 플랫폼
  - 가상환경 관리자 및 패키지 관리자 기능
- 가상 개발 환경을 설정하여 각 프로젝트 마다 서로 다른 개발 환경 구축 가능
- 아나콘다를 설치하면 다음 패키지들도 함께 설치됨
  - Python, Numpy, Pandas, Matplotlib, Jupyter Notebook 등
- 아나콘다와 파이썬을 동시 설치 시 문제가 발생할 수 있음
- 아나콘다 홈페이지
  - https://www.anaconda.com/



아나콘다 설치(1)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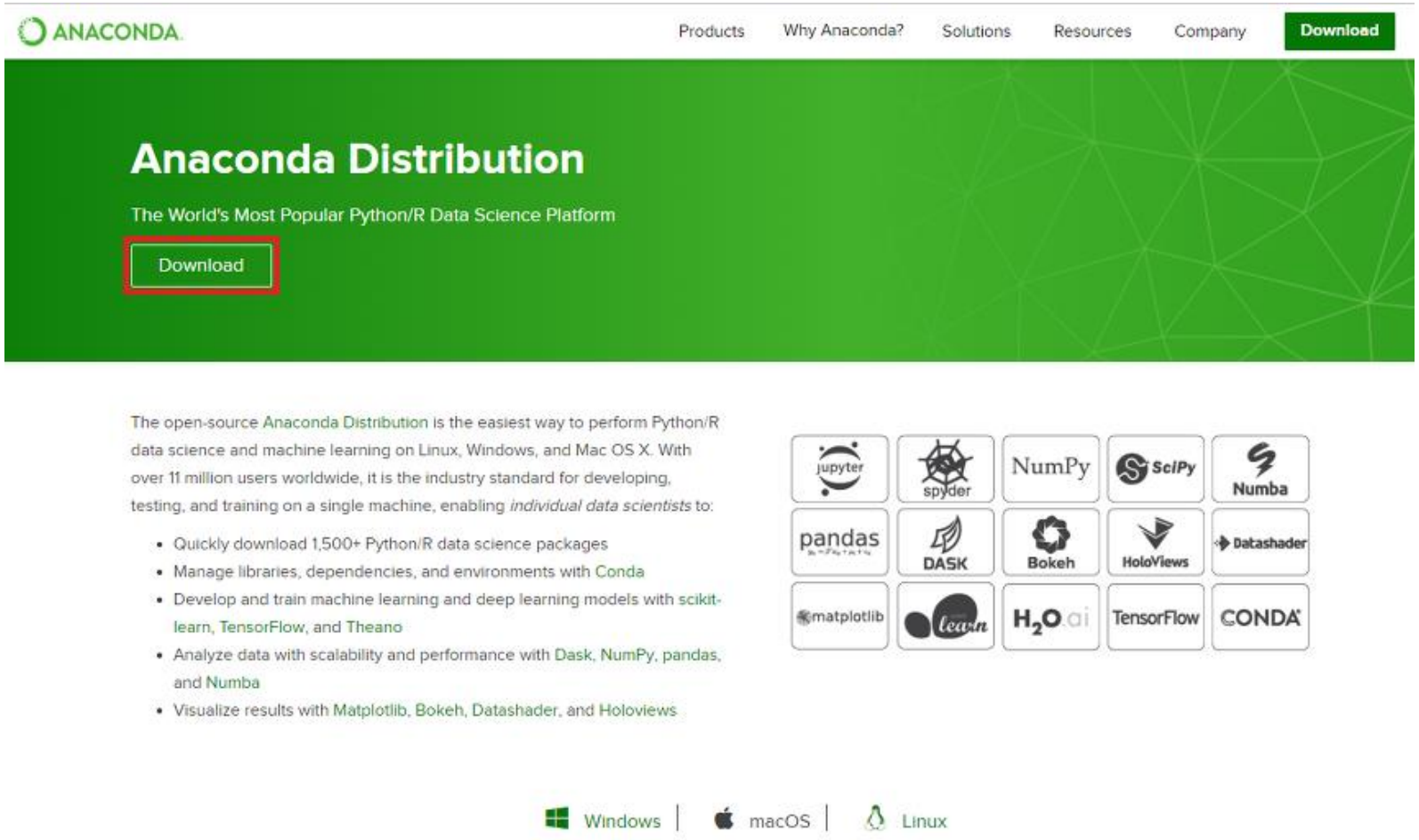
아나콘다 설치(2)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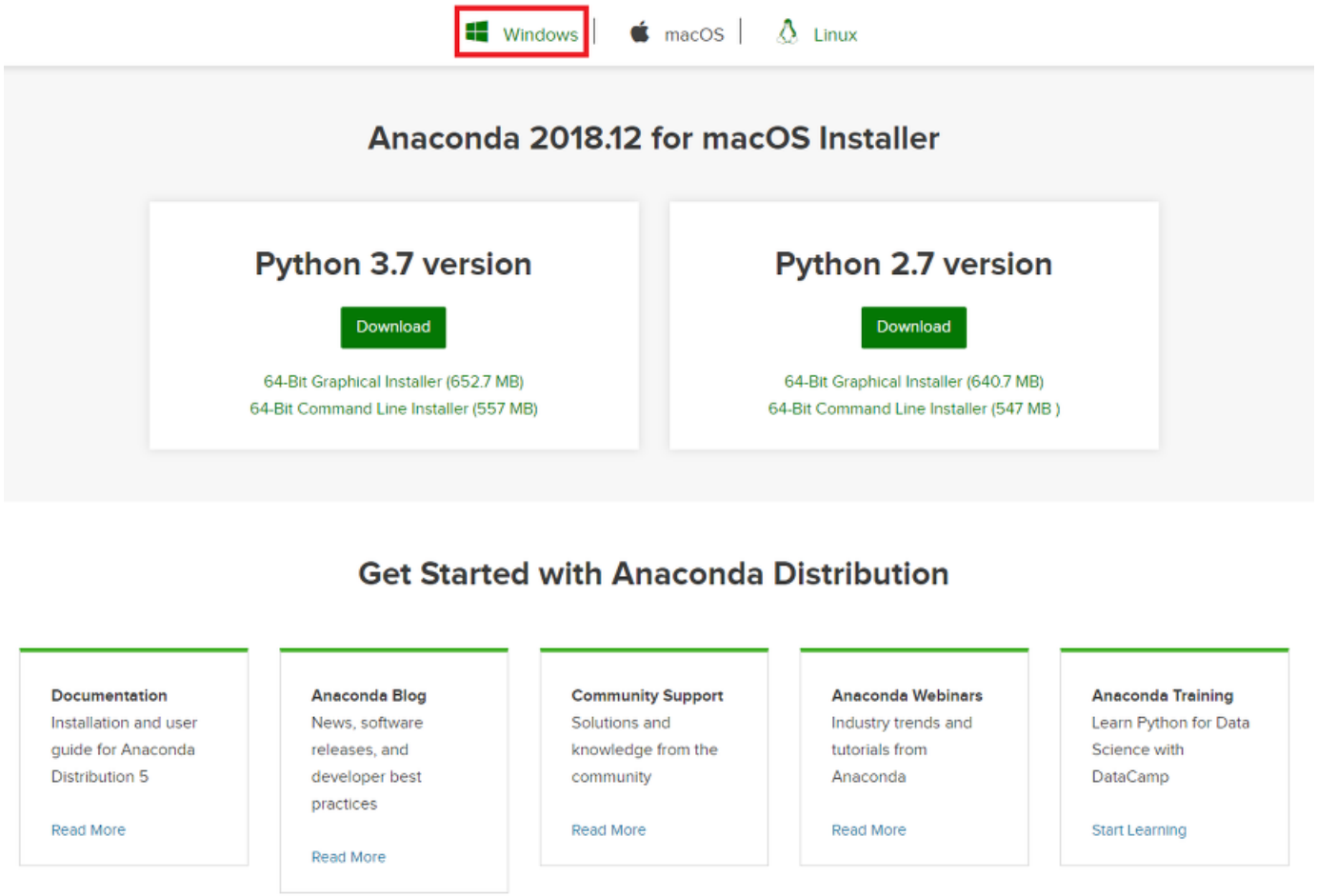
아나콘다 설치(3)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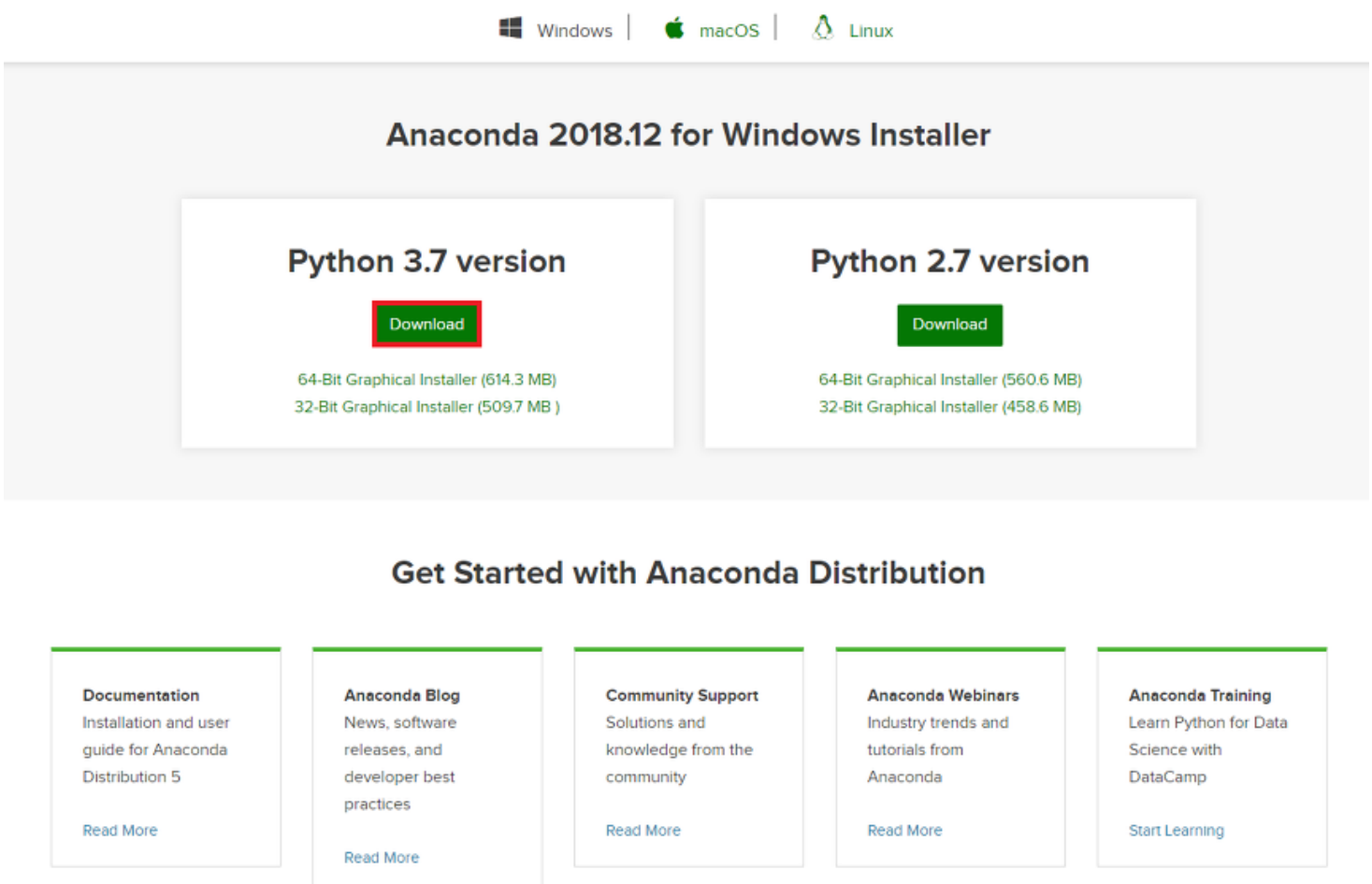
아나콘다 설치(4)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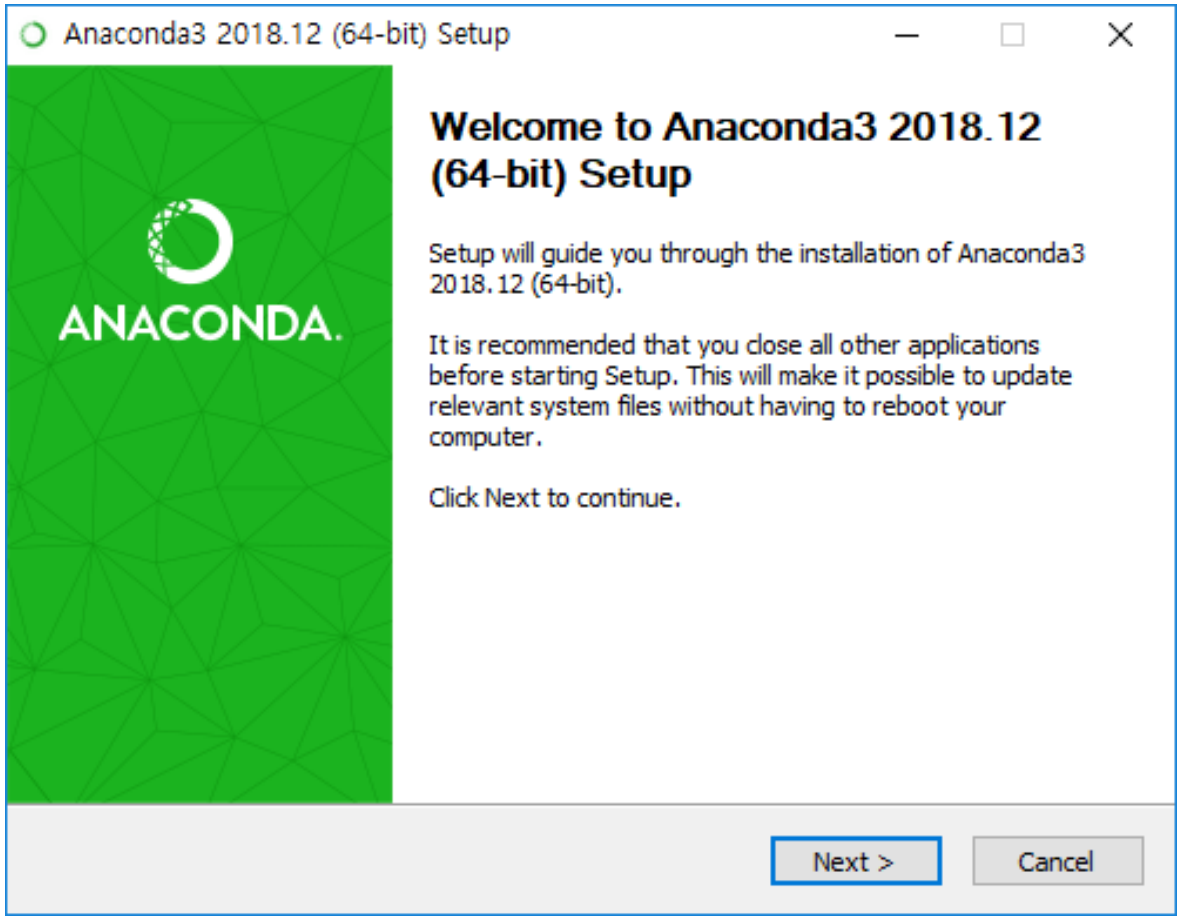
아나콘다 설치(5)


Anaconda3 2018.12 (64-bit) Setup
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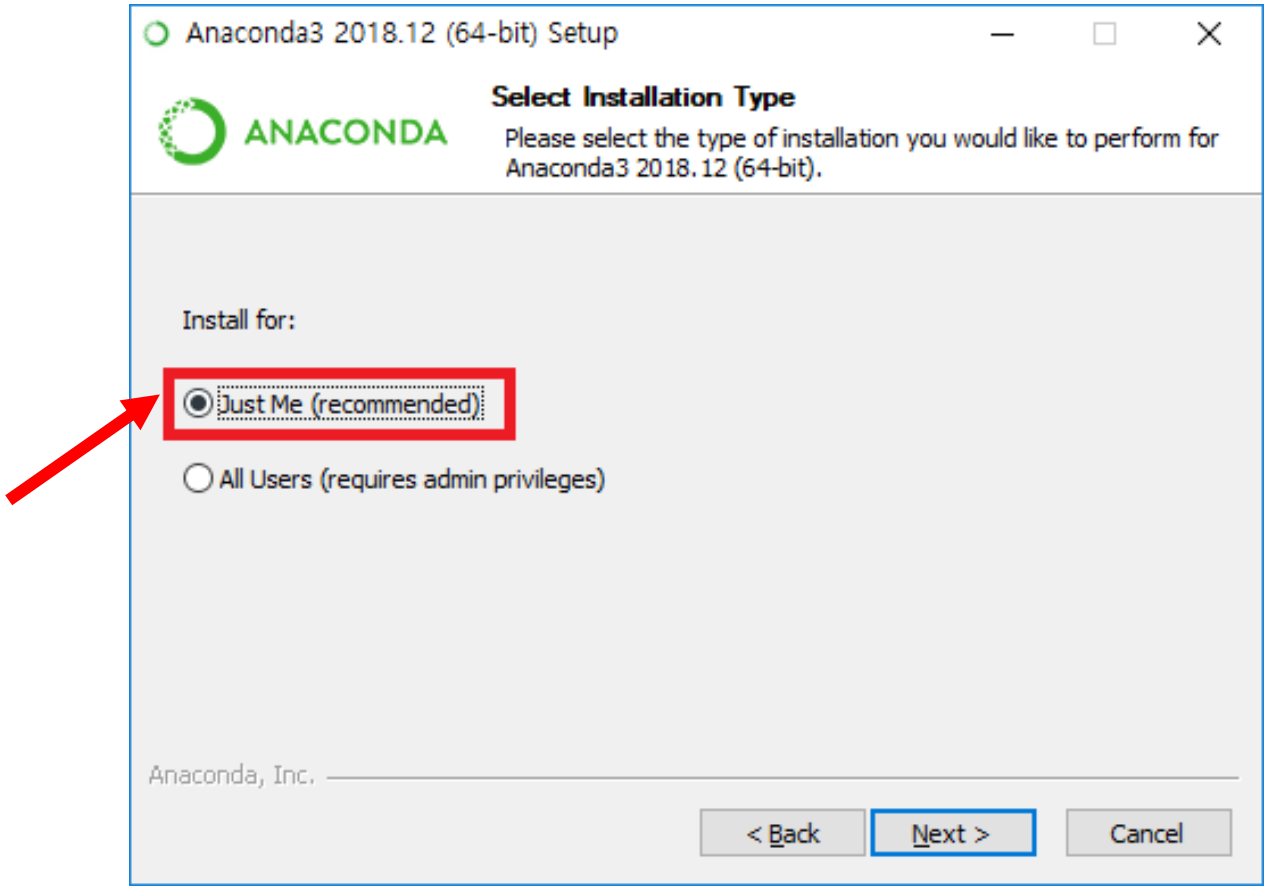
Welcome to Anaconda3 2018.12 (64-bit) Setup
Setup will guide you through the installation of Anaconda3 2018.12 (64-bit).
It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.
Click Next to continue.
Next >
Cancel

아나콘다 설치(6)


Anaconda3 2018.12 (64-bit) Setup
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Select Installation Type
Please select the type of installation you would like to perform for Anaconda3 2018.12 (64-bit).
Install for:
Just Me (recommended)
All Users (requires admin privileges)
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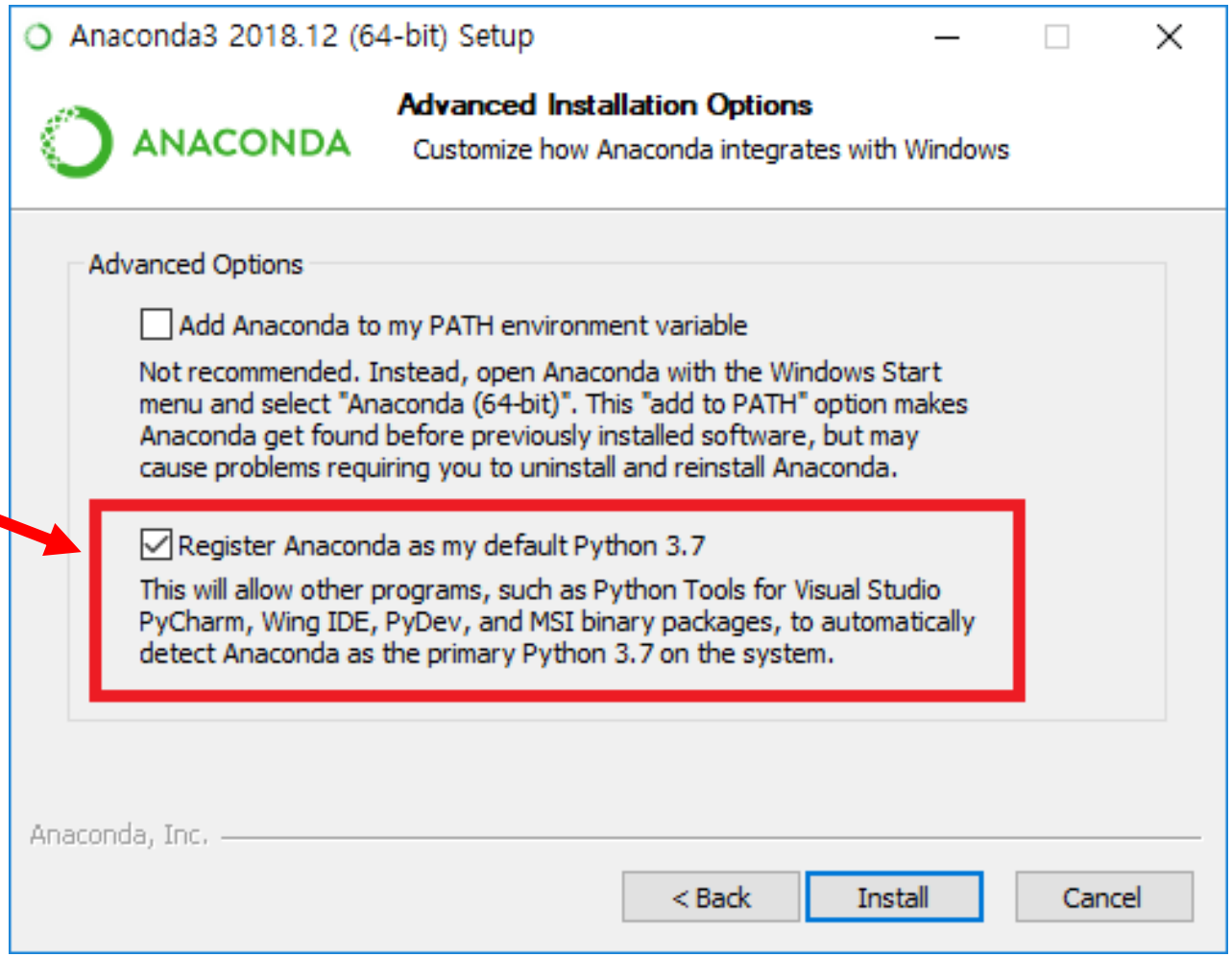
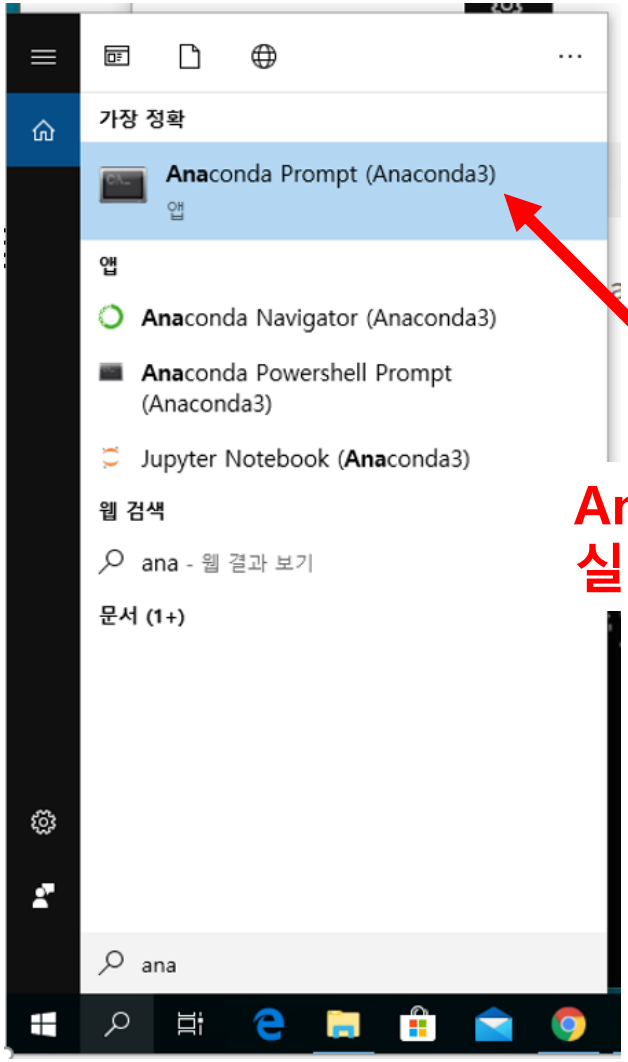
아나콘다 설치(7)


Anaconda3 2018.12 (64-bit) Setup
ANACONDA
Advanced Installation Options
Customize how Anaconda integrates with Windows
Advanced Options
Add Anaconda to my PATH environment variable
Not recommended. Instead, open Anaconda with the Windows Start menu and select "Anaconda (64-bit)". This "add to PATH" option makes Anaconda get found before previously installed software, but may cause problems requiring you to uninstall and reinstall Anaconda.
Register Anaconda as my default Python 3.7
This will allow other programs, such as Python Tools for Visual Studio PyCharm, Wing IDE, PyDev, and MSI binary packages, to automatically detect Anaconda as the primary Python 3.7 on the system.
Anaconda, Inc.
< Back
Install
Cancel

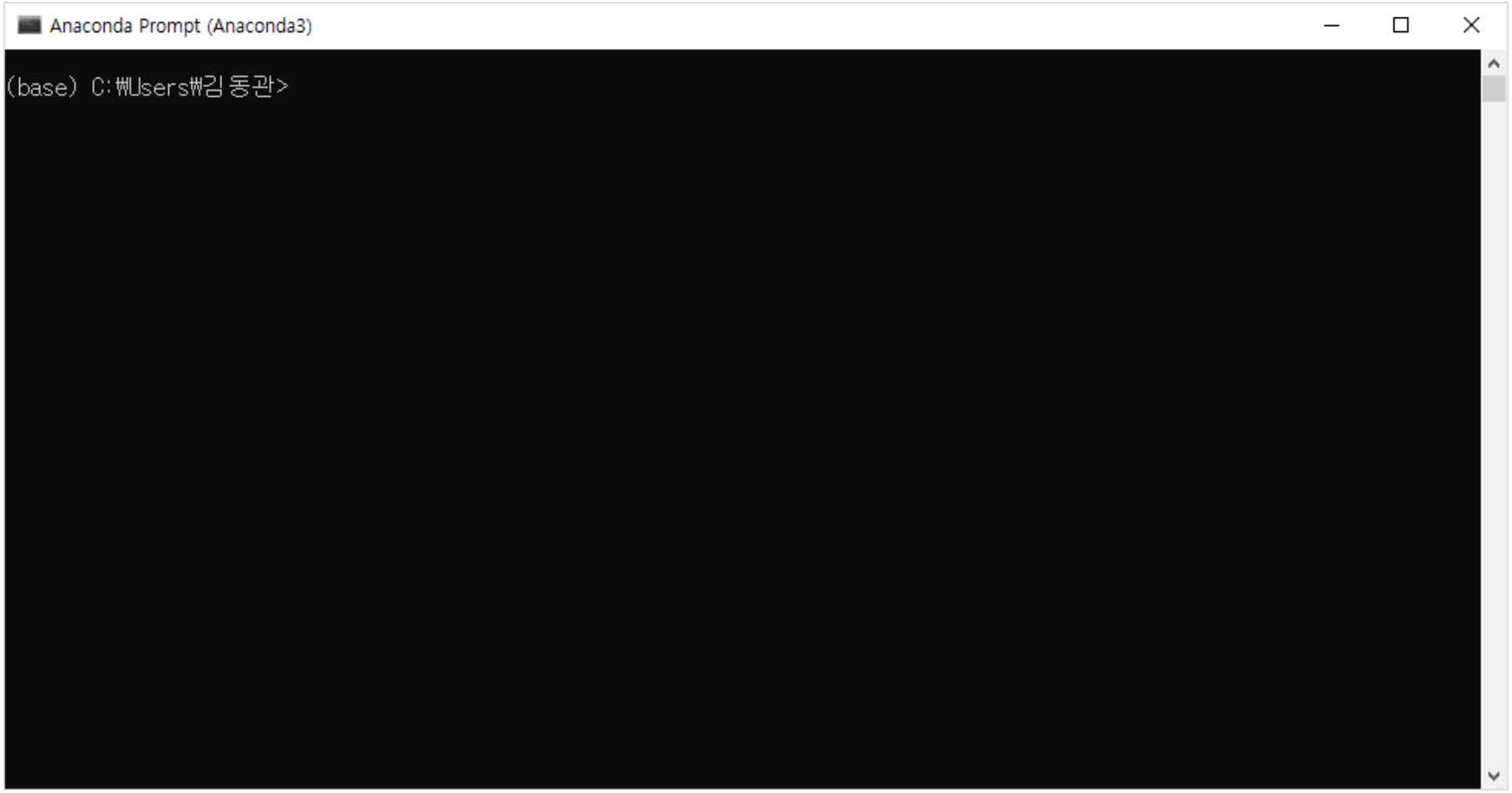
아나콘다 설치(8)

아나콘다가 정상 설치되면
윈도우즈 검색창에
Anaconda Prompt가 검색됨



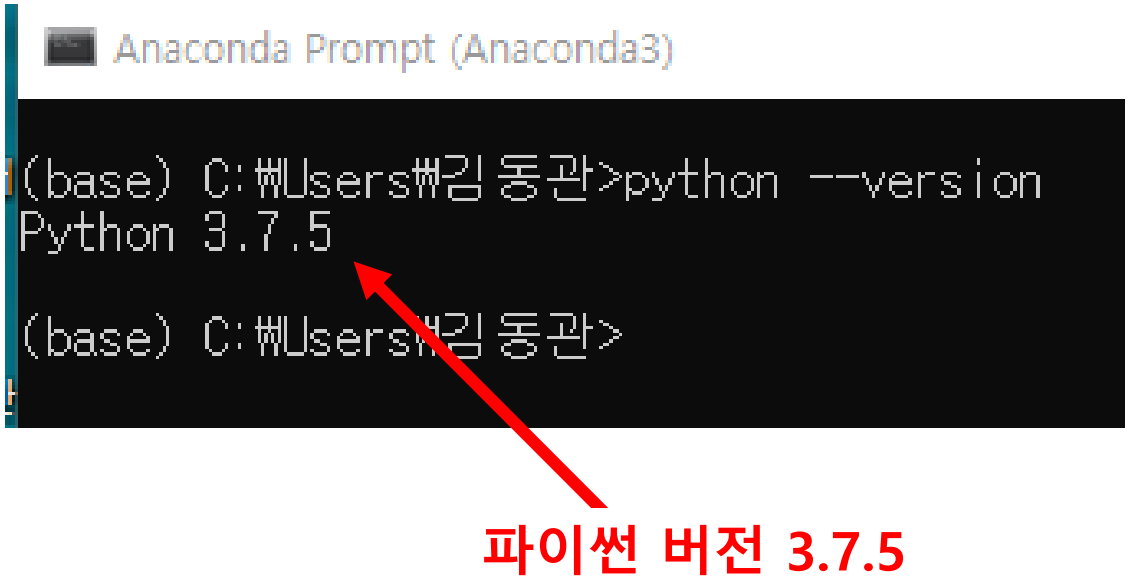
Anaconda Prompt 실행

아나콘다 프롬프터 실행화면



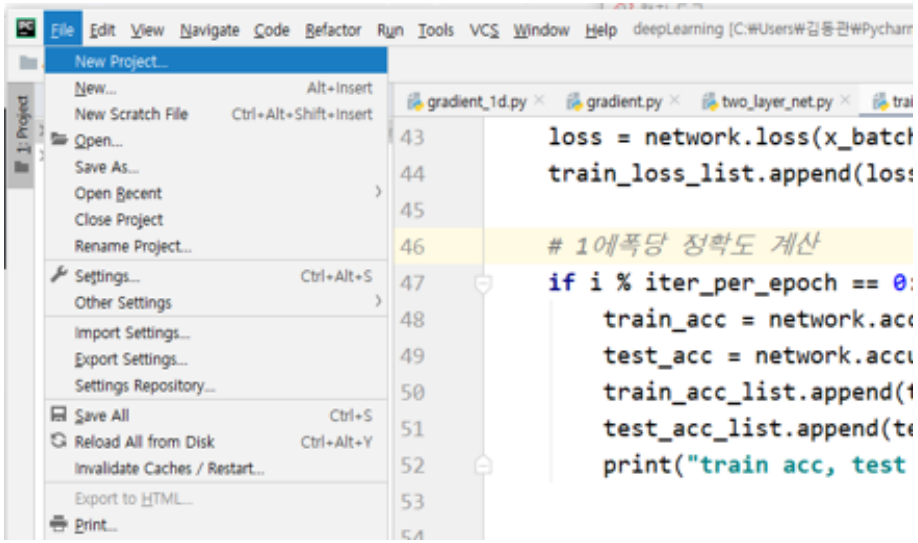
파이썬 설치 확인

- 아나콘다 프롬프터 실행
- 다음 명령어로 설치된 파이썬의 버전 확인
- python –version



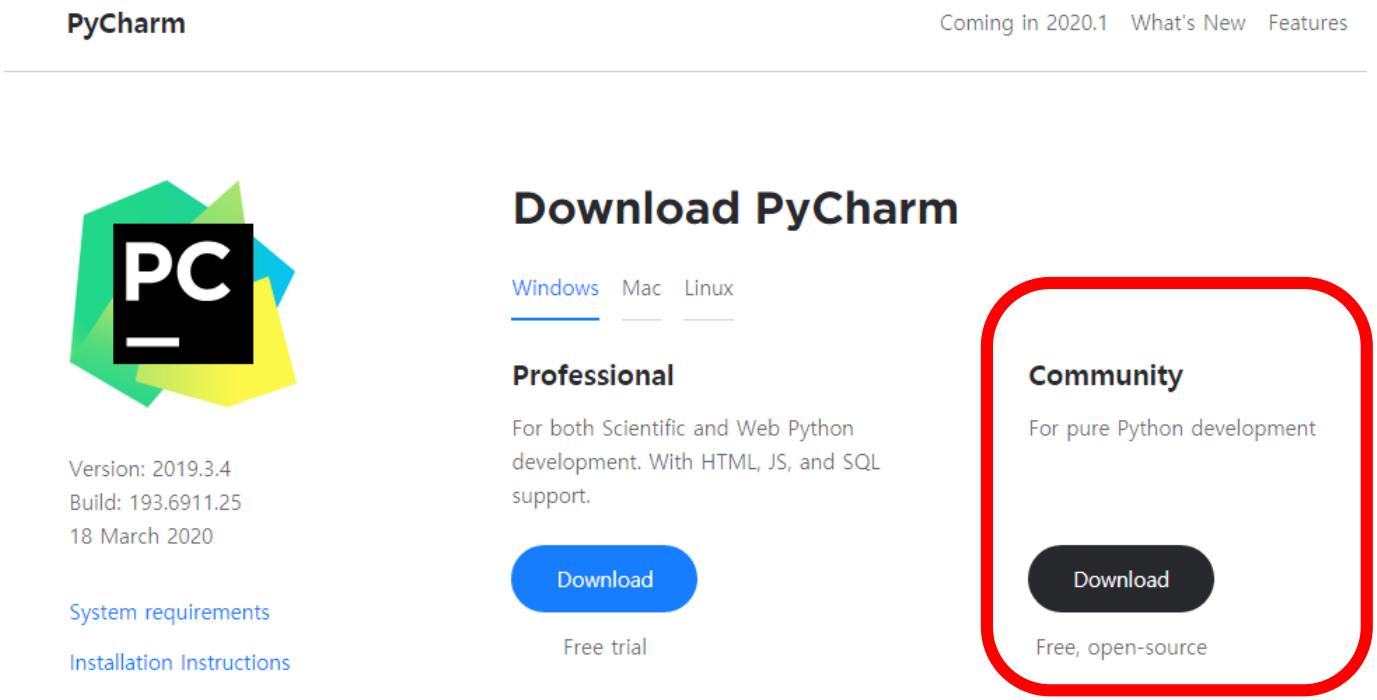
PyCharm

- PyCharm은 파이썬 프로그래밍을 위한 편집기로 파이썬 코딩 및 실행 기능 제공



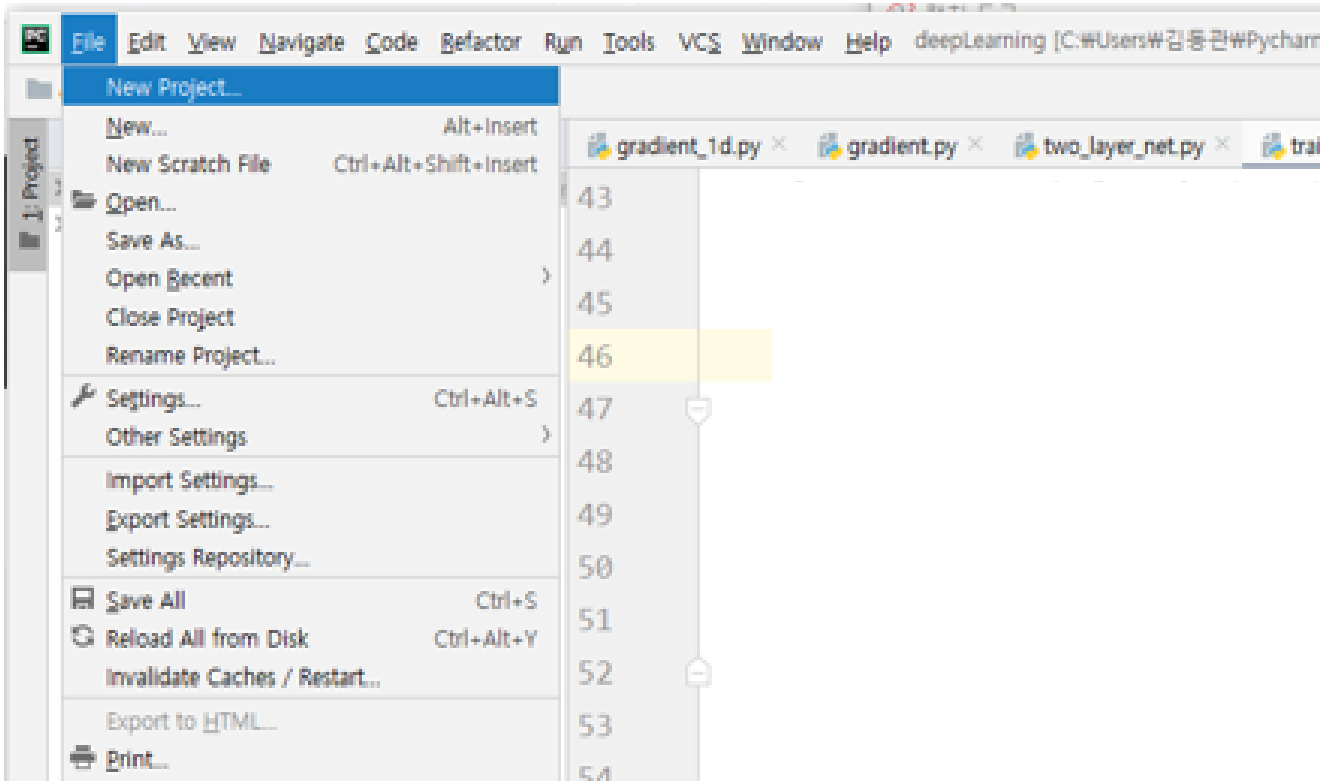
PyCharm 설치

- PyCharm 홈페이지에서 프로그램 다운로드
  - https://www.jetbrains.com/pycharm/
- PyCharm Community Edition 다운로드 후 설치
  - Professional 버전과 Community 버전이 있으며 Community 버전은 무료 사용



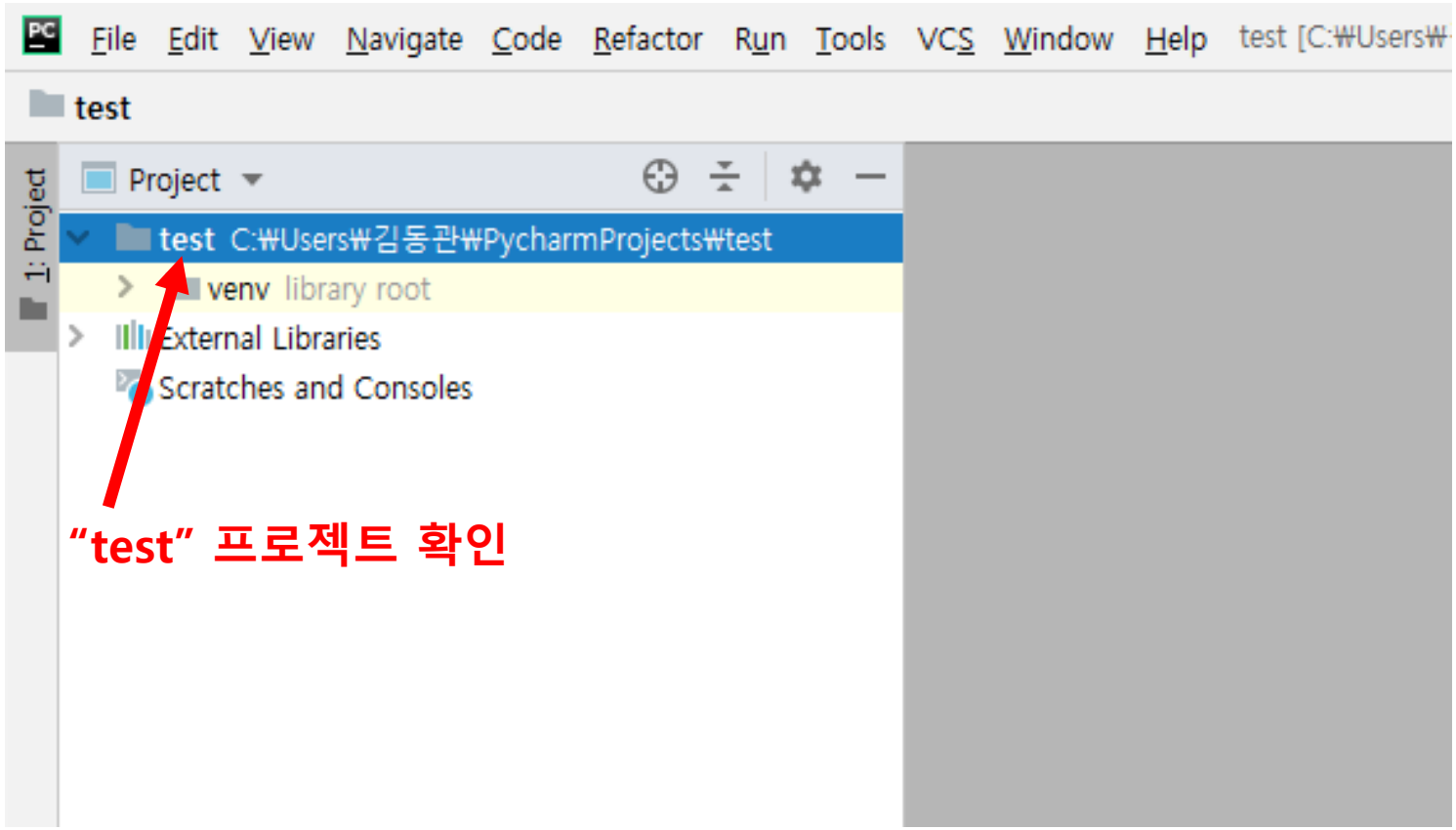
새 프로젝트 생성

- 메뉴선택: File ⇒ New Project



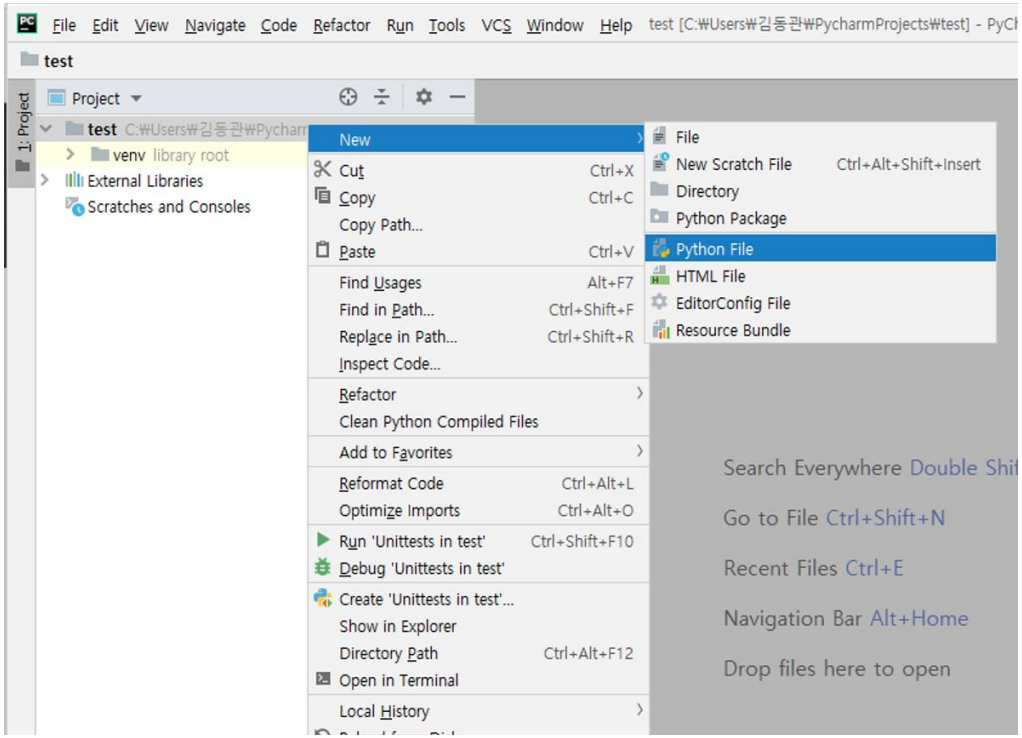
"test" 프로젝트 생성

- 새 프로젝트 이름은 "test"라고 하자



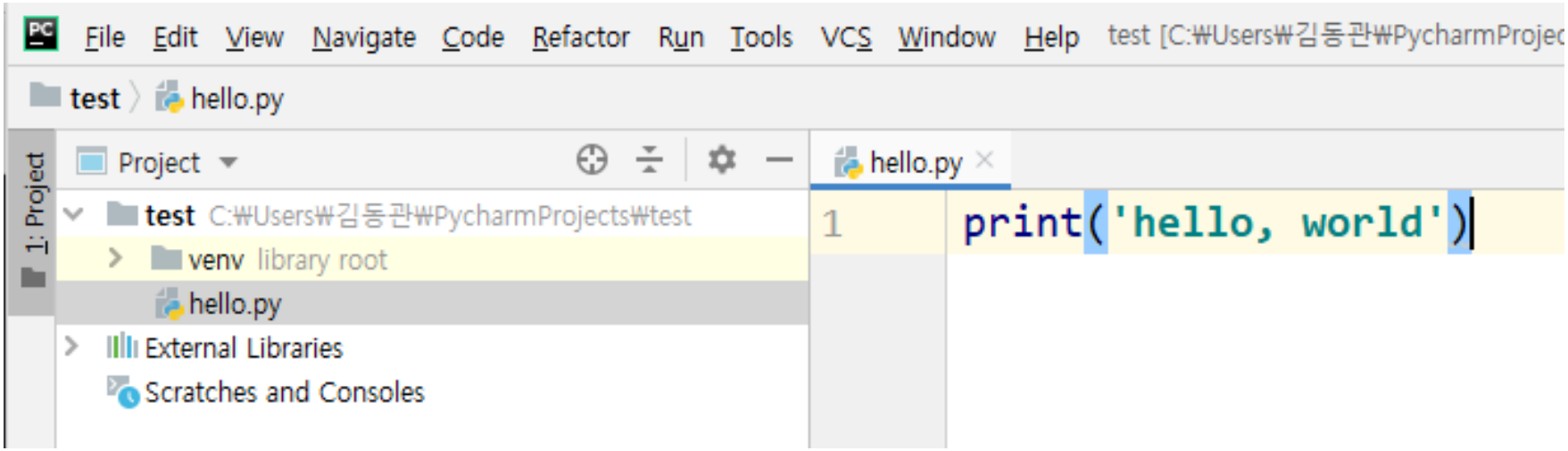
“hello.py” 파일 생성

- 프로젝트 “test”에 마우스 위치 후 오른쪽 버튼 클릭
- 메뉴선택: New ⇒ Python File
- 파일이름은 “hello.py”로 하자



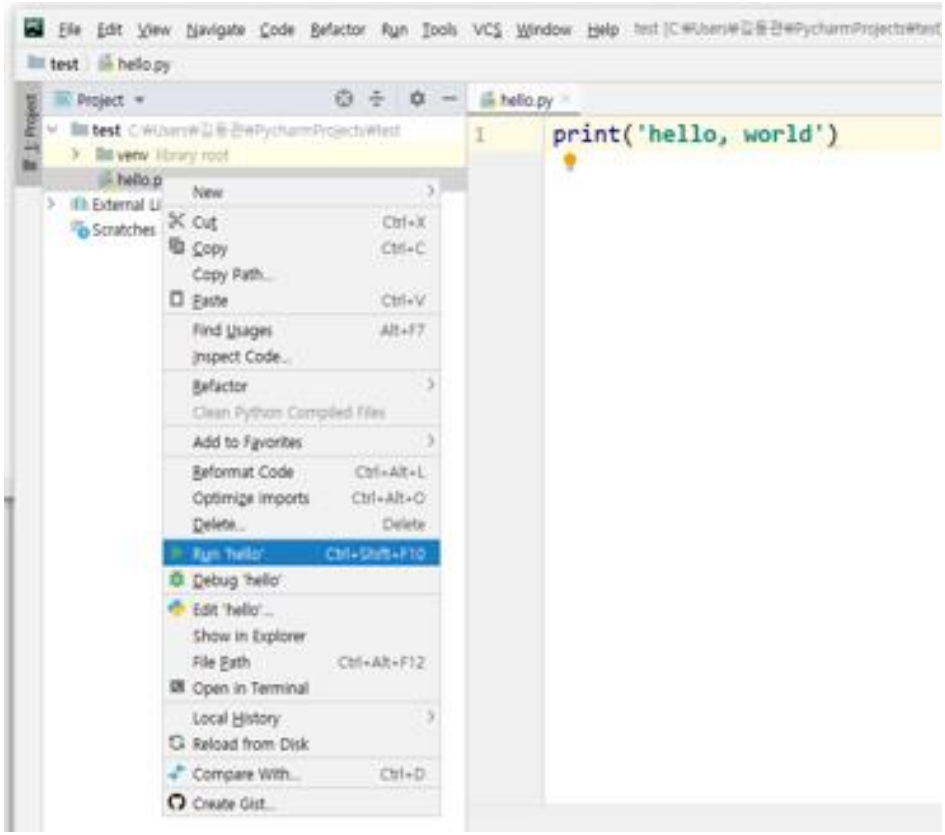
“hello.py” 코드 작성

- 아래 화면처럼 print(‘hello, world’) 입력 한다



“hello.py” 파일 실행

- “hello.py” 파일에 마우스 위치 후 오른쪽 버튼 클릭
- 실행하기 위해 “Run ‘hello’” 메뉴 선택



“hello.py” 파일 실행 결과 확인