

[Python]



# Python으로 배우는 소프트웨어 원리

## Appendix 00. 파이썬 관련 설치 목록

# 목차

1. Python 설치
2. PyCharm 설치
3. PyInstaller 설치
4. matplotlib 설치
5. BeautifulSoup 설치
6. cx\_Oracle 설치
7. oracledb 설치
8. 기타 SW
- 9. 기타 요구사항**

# 01. 파이썬 설치

## I. 파이썬 설치

실습 2-5

파이썬 설치하기

- ① 파이썬 공식 홈페이지(<http://python.org>)에 접속

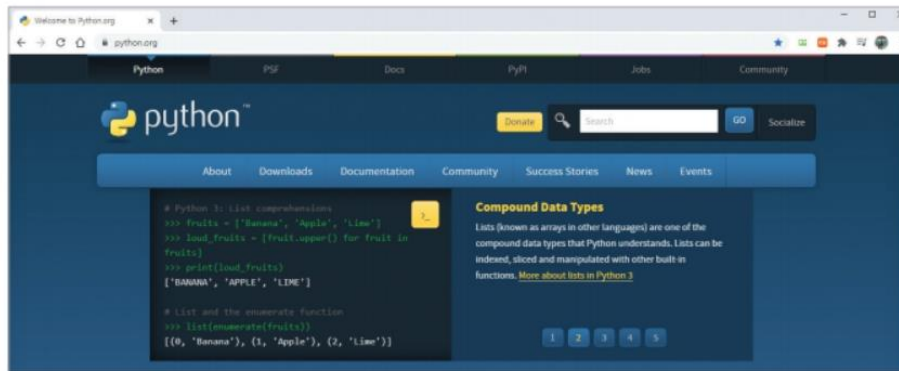


그림 2-6 파이썬 사이트 메인 화면

- ② [Downloads] 메뉴를 클릭하고  
[Windows]를 선택

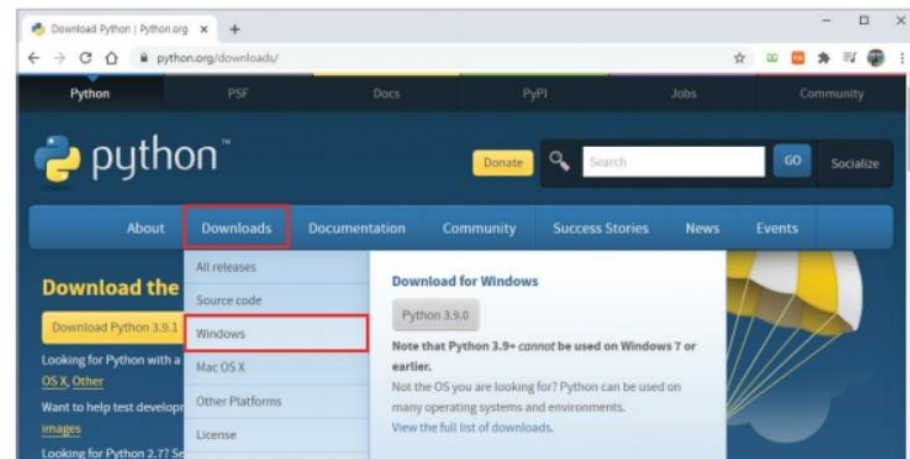


그림 2-7 [Downloads] 메뉴 클릭 후 [Windows] 선택

# 01. 파이썬 설치

## I. 파이썬 설치

실습 2-5

파이썬 설치하기

- ③ 최근 버전의 [Download Windows Installer (64-bit)] 클릭
- ④ 설치 파일을 다운로드할 폴더를 선택하고 클릭

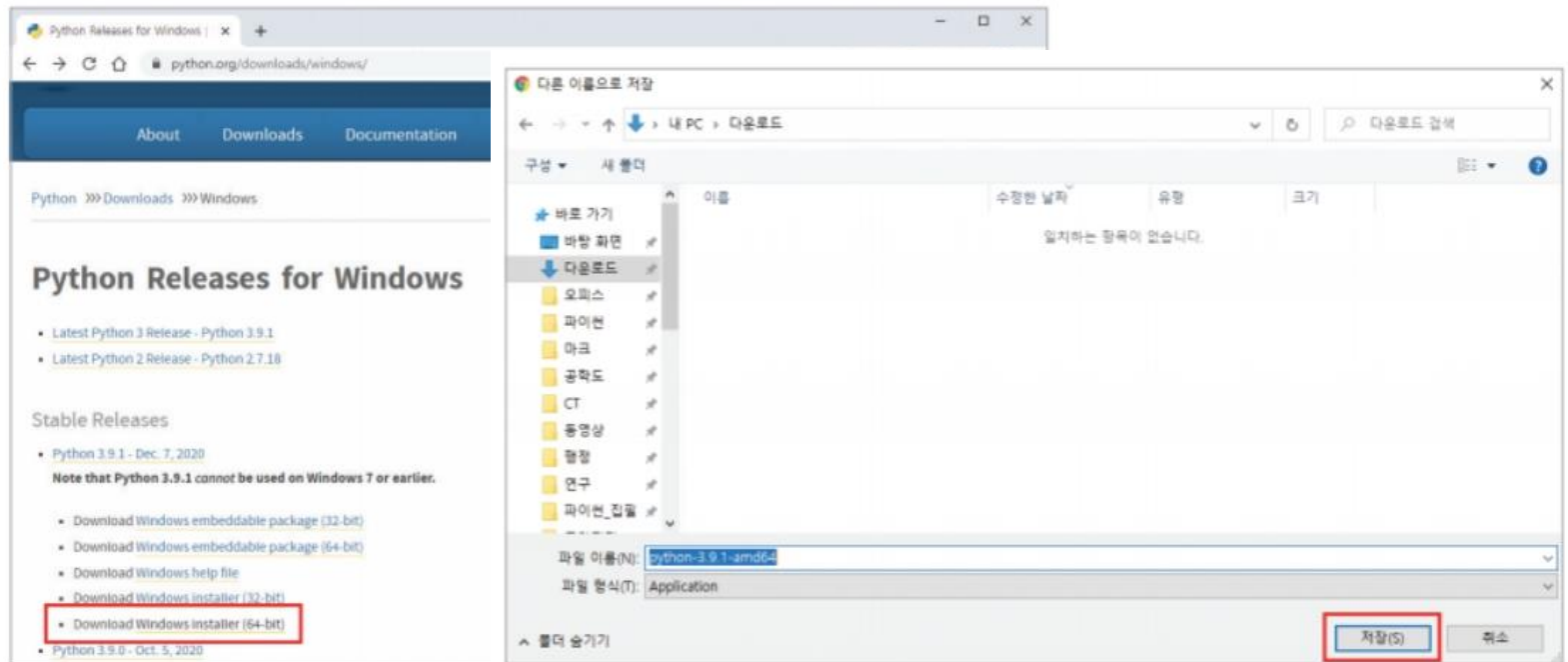


그림 2-8 [Download Windows Installer] 그림 2-9 설치 파일을 다운로드할 폴더 선택

# 01. 파이썬 설치

## I. 파이썬 설치

실습 2-5

파이썬 설치하기

- ⑤ 다운로드한 폴더에 있는 설치 파일을 실행하고, 설치 시작 화면에서 [Add Python 3.9 to PATH] 항목을 반드시 클릭
- ⑥ 설치 과정이 끝난 후 설치 성공을 알리는 화면이 나타나면 [Close] 클릭

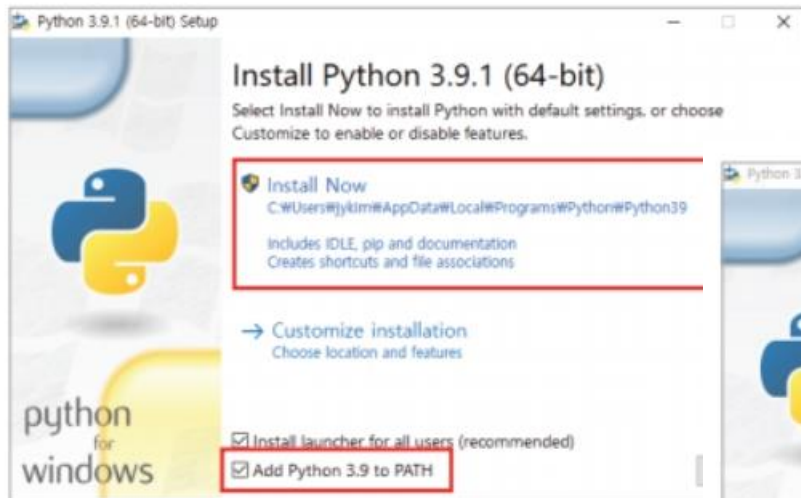


그림 2-10 설치 시작

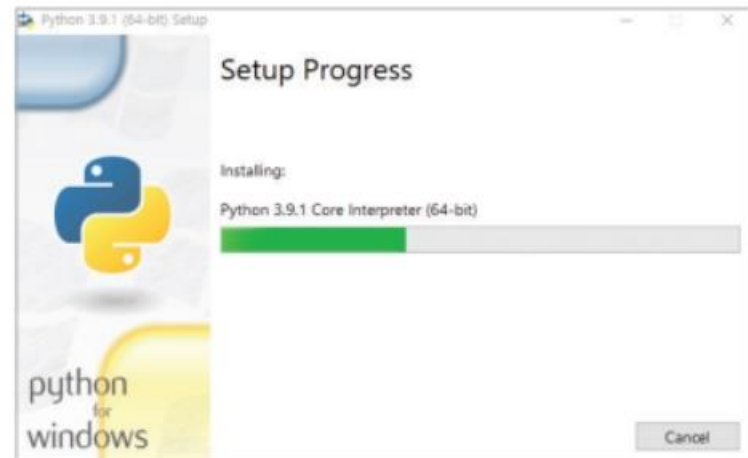


그림 2-11 설치 진행

# 01. 파이썬 설치

## I. 파이썬 설치

### 실습 2-6

### 파이썬 설치 확인과 도움말 보기

- ① 윈도우 키와 R을 함께 누르면 [실행] 창이 나타나는데, 열기 항목에 'cmd'라고 입력하고 [확인]

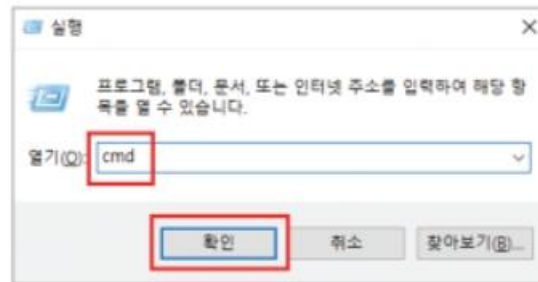


그림 2-13 명령 프롬프트 열기

- ② 명령 프롬프트 창이 나타나면 'python'이라고 명령을 입력하고 Enter를 누름

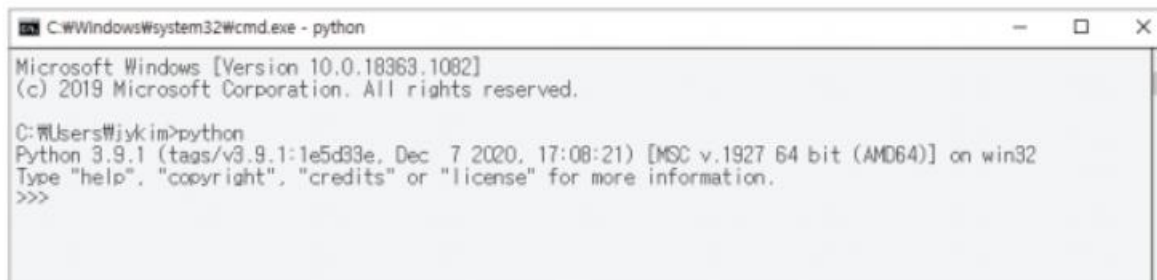


그림 2-14 파이썬 프로그램 동작 확인

# 01. 파이썬 설치

## I. 파이썬 설치

### 여기서 잠깐 시스템 환경 변수 설정 방법

- ① [제어판]- [시스템]- [고급 시스템 설정] 클릭
- ② 시스템 속성 창이 나타나면 [환경 변수] 클릭

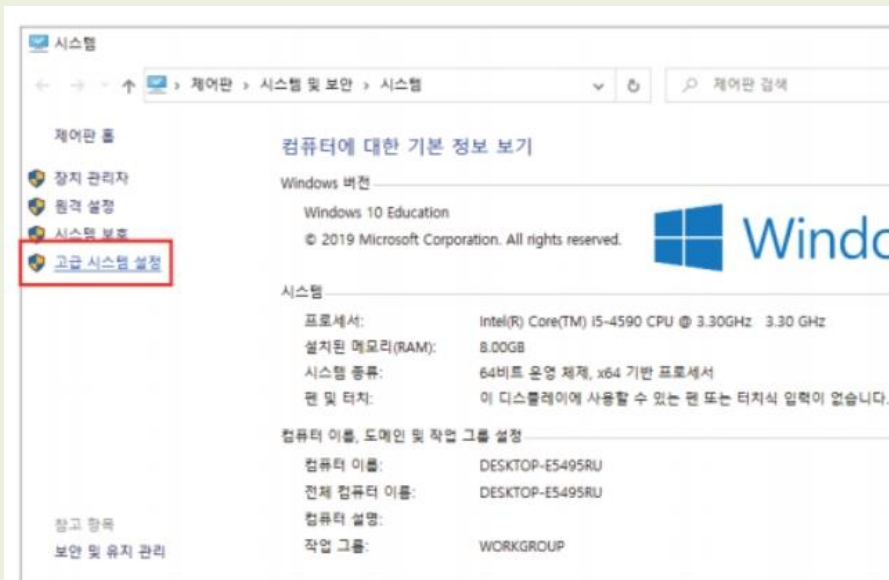


그림 2-15 고급 시스템 설정

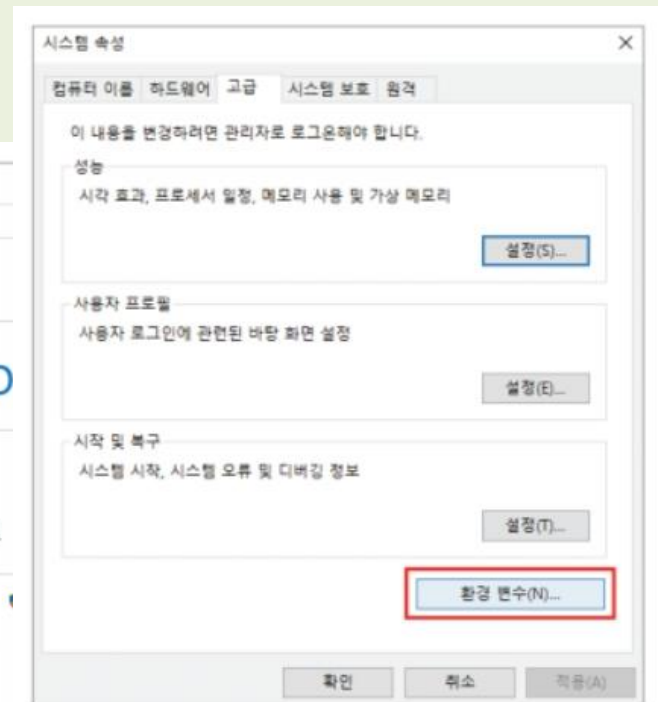


그림 2-16 환경 변수 클릭

# 01. 파이썬 설치

## I. 파이썬 설치

### 여기서 잠깐 시스템 환경 변수 설정 방법

- ③ 환경 변수 창이 나타나면 [시스템 변수] 목록에서 [Path]를 선택, [편집]클릭
- ④ 환경 변수 편집 창에서 [새로 만들기]를 눌러 파이썬 설치 폴더를 입력 후 [확인] 클릭

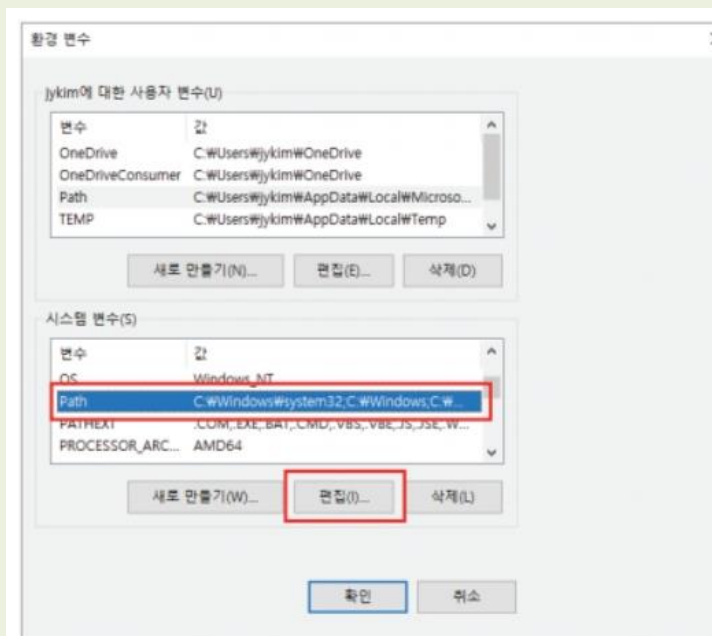


그림 2-17 시스템 변수 편집

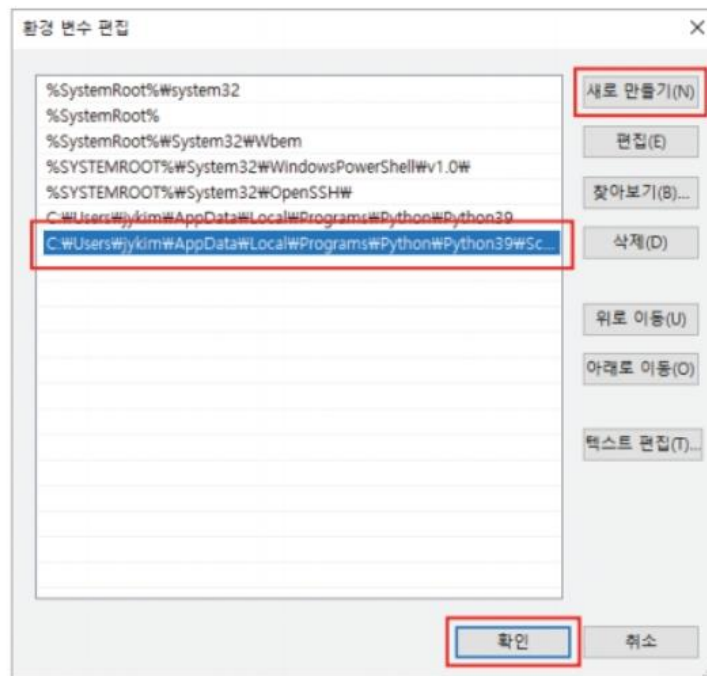


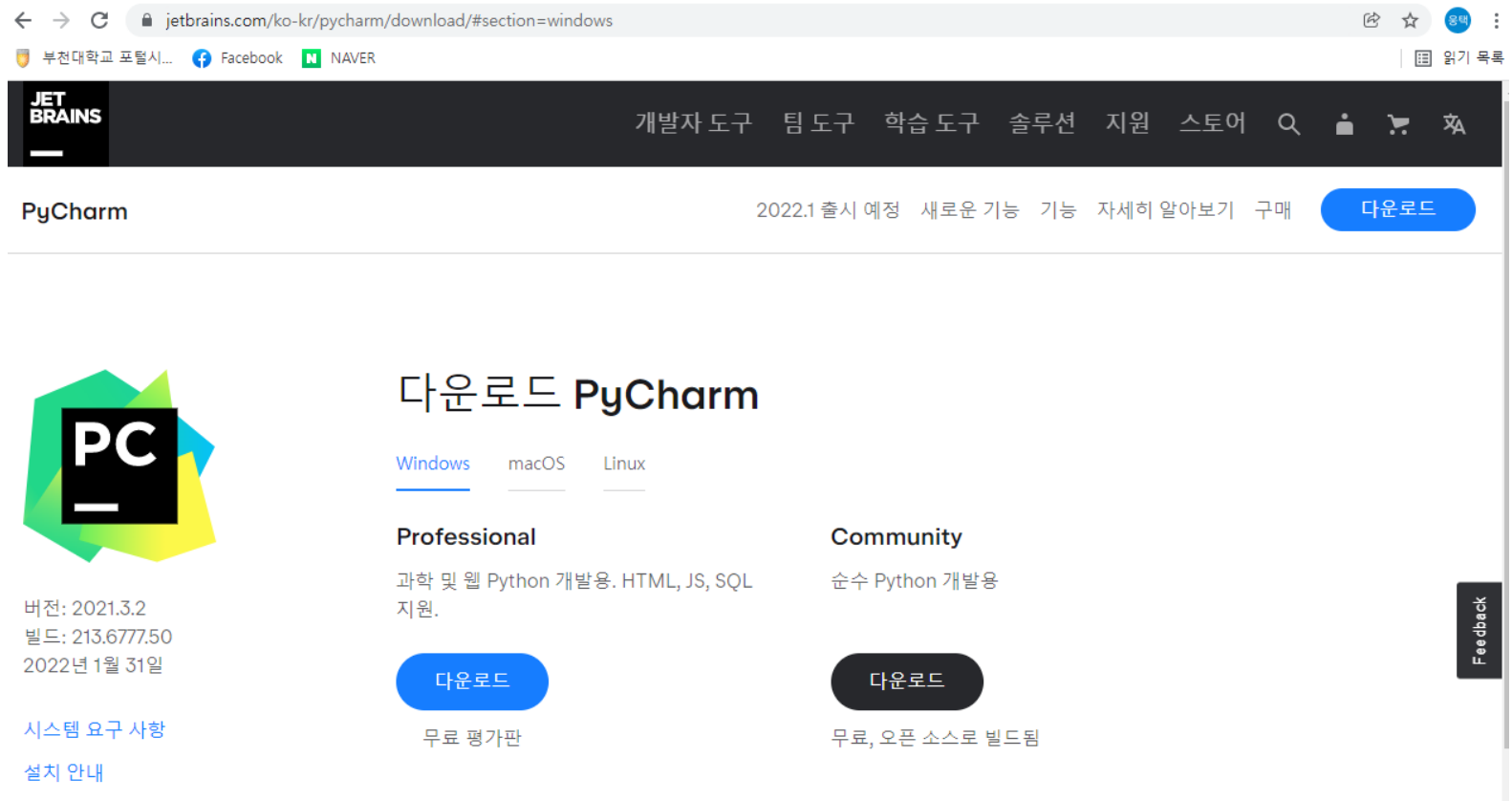
그림 2-18 환경 변수 추가



## 02. PyCharm 설치

### I. PyCharm 설치

<https://www.jetbrains.com/ko-kr/pycharm/download/#section=windows>



The screenshot shows the JetBrains website's PyCharm download page for Windows. The page is in Korean. At the top, there's a navigation bar with the JetBrains logo and links for '개발자 도구' (Developer Tools), '팀 도구' (Team Tools), '학습 도구' (Learning Tools), '솔루션' (Solutions), '지원' (Support), and '스토어' (Store). Below the navigation bar, the page title is 'PyCharm'. To the right of the title, it says '2022.1 출시 예정' (Coming in 2022.1), '새로운 기능' (New Features), '기능' (Features), '자세히 알아보기' (Learn More), and '구매' (Purchase). A blue '다운로드' (Download) button is visible. The main content area has a large '다운로드 PyCharm' (Download PyCharm) heading. Below this, there are tabs for 'Windows' (selected), 'macOS', and 'Linux'. Under the 'Windows' tab, there are two sections: 'Professional' and 'Community'. The 'Professional' section describes it as '과학 및 웹 Python 개발용. HTML, JS, SQL 지원.' (For scientific and web Python development. Supports HTML, JS, SQL). It has a blue '다운로드' button and a link to '무료 평가판' (Free Trial). The 'Community' section describes it as '순수 Python 개발용' (For pure Python development). It has a blue '다운로드' button and a link to '무료, 오픈 소스로 빌드됨' (Free, built as open source). On the left side of the page, there's a large 'PC' logo with a checkmark. Below it, it lists the version '버전: 2021.3.2', build number '빌드: 213.6777.50', and release date '2022년 1월 31일'. There are also links for '시스템 요구 사항' (System Requirements) and '설치 안내' (Installation Guide). A vertical 'Feedback' button is on the right side of the page.

PyCharm

2022.1 출시 예정 새로운 기능 기능 자세히 알아보기 구매 다운로드

### 다운로드 PyCharm

Windows macOS Linux

#### Professional

과학 및 웹 Python 개발용. HTML, JS, SQL 지원.

다운로드

무료 평가판

#### Community

순수 Python 개발용

다운로드

무료, 오픈 소스로 빌드됨

Feedback

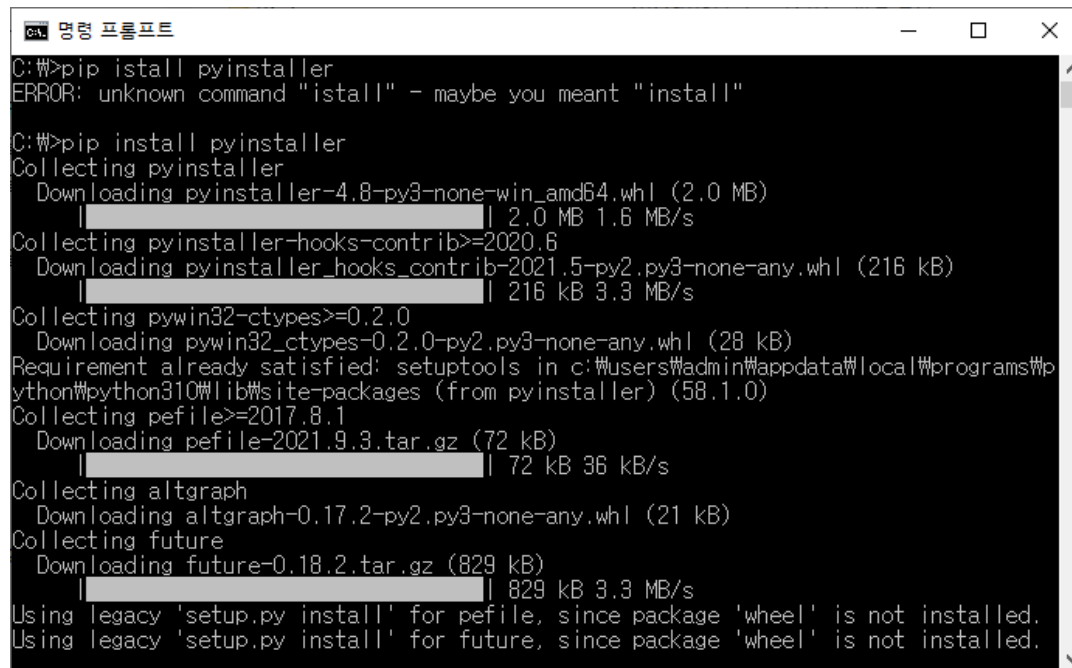
버전: 2021.3.2  
빌드: 213.6777.50  
2022년 1월 31일

시스템 요구 사항  
설치 안내

## 03. Installer 설치

### [PyInstaller 설치]

- 명령프롬프트다음 명령어를 실행하여 PyInstaller 패키지를 설치
  - pip install pyinstaller



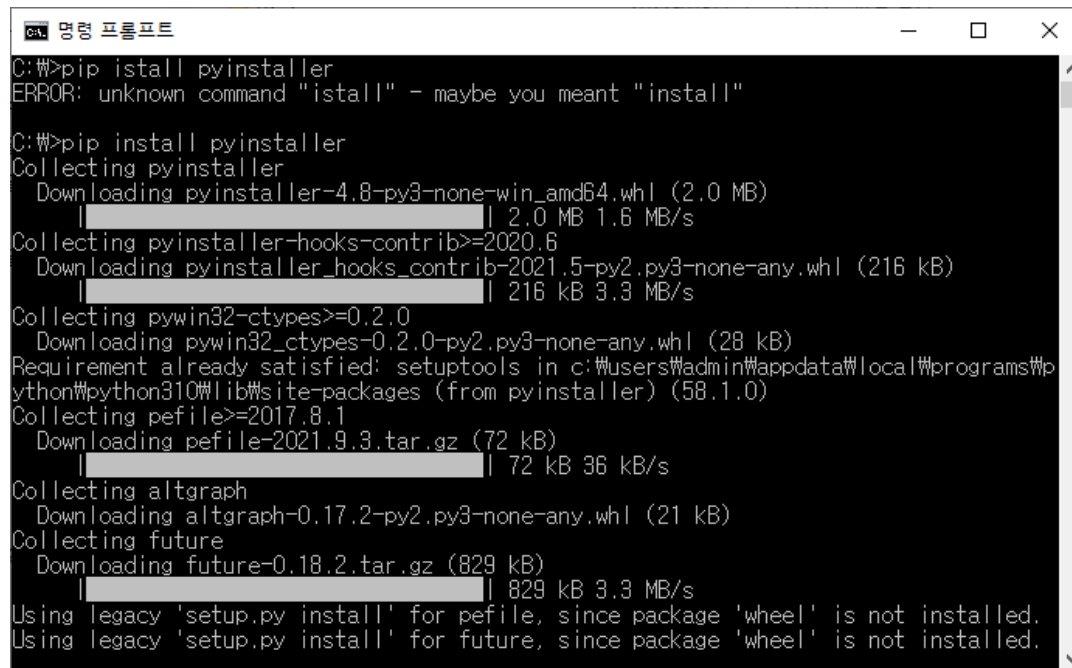
```
명령 프롬프트
C:\>pip install pyinstaller
ERROR: unknown command "install" - maybe you meant "install"

C:\>pip install pyinstaller
Collecting pyinstaller
  Downloading pyinstaller-4.8-py3-none-win_amd64.whl (2.0 MB)
    |#####| 2.0 MB 1.6 MB/s
Collecting pyinstaller-hooks-contrib>=2020.6
  Downloading pyinstaller_hooks_contrib-2021.5-py2.py3-none-any.whl (216 kB)
    |#####| 216 kB 3.3 MB/s
Collecting pywin32-ctypes>=0.2.0
  Downloading pywin32-ctypes-0.2.0-py2.py3-none-any.whl (28 kB)
Requirement already satisfied: setuptools in c:\users\admin\appdata\local\programs\python\python310\lib\site-packages (from pyinstaller) (58.1.0)
Collecting pefile>=2017.8.1
  Downloading pefile-2021.9.3.tar.gz (72 kB)
    |#####| 72 kB 36 kB/s
Collecting altgraph
  Downloading altgraph-0.17.2-py2.py3-none-any.whl (21 kB)
Collecting future
  Downloading future-0.18.2.tar.gz (829 kB)
    |#####| 829 kB 3.3 MB/s
Using legacy 'setup.py install' for pefile, since package 'wheel' is not installed.
Using legacy 'setup.py install' for future, since package 'wheel' is not installed.
```

## 04. matplotlib 설치

### [matplotlib 설치]

- 명령프롬프트다음 명령어를 실행하여 matplotlib 패키지를 설치  
➤ pip install matplotlib



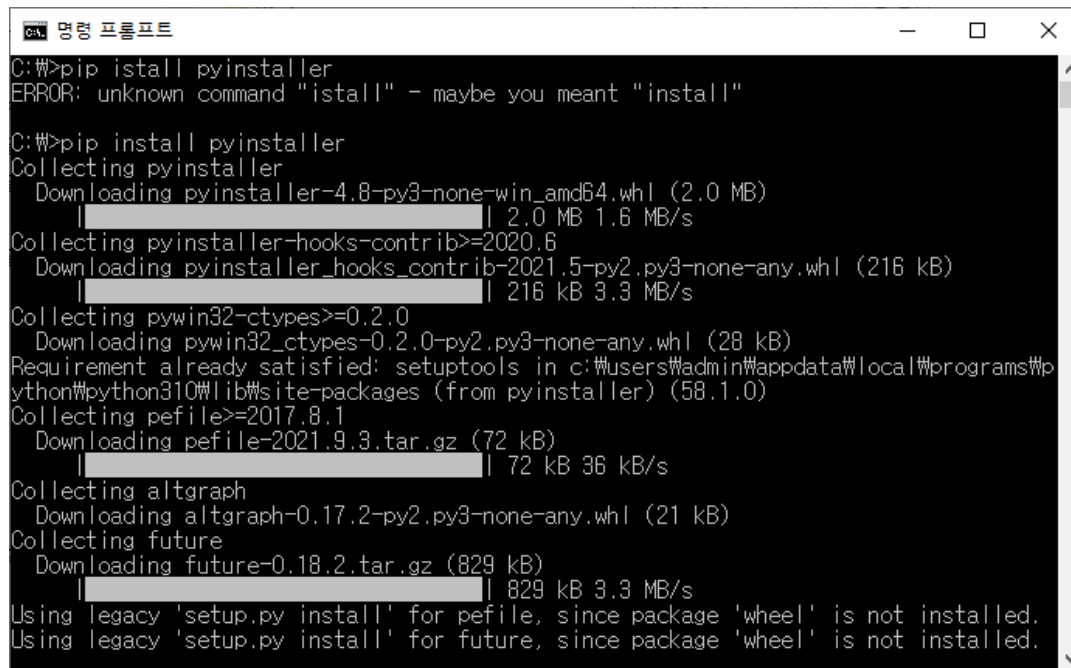
```
C:\>pip install pyinstaller
ERROR: unknown command "install" - maybe you meant "install"

C:\>pip install pyinstaller
Collecting pyinstaller
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Collecting pywin32-ctypes>=0.2.0
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Requirement already satisfied: setuptools in c:\users\admin\appdata\local\programs\python\python310\lib\site-packages (from pyinstaller) (58.1.0)
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Collecting future
  Downloading future-0.18.2.tar.gz (829 kB)
    |#####| 829 kB 3.3 MB/s
Using legacy 'setup.py install' for pefile, since package 'wheel' is not installed.
Using legacy 'setup.py install' for future, since package 'wheel' is not installed.
```

## 05. BeautifulSoup 설치

### [BeautifulSoup 설치]

- 명령프롬프트다음 명령어를 실행하여 BeautifulSoup 패키지를 설치  
➤ pip install BeautifulSoup



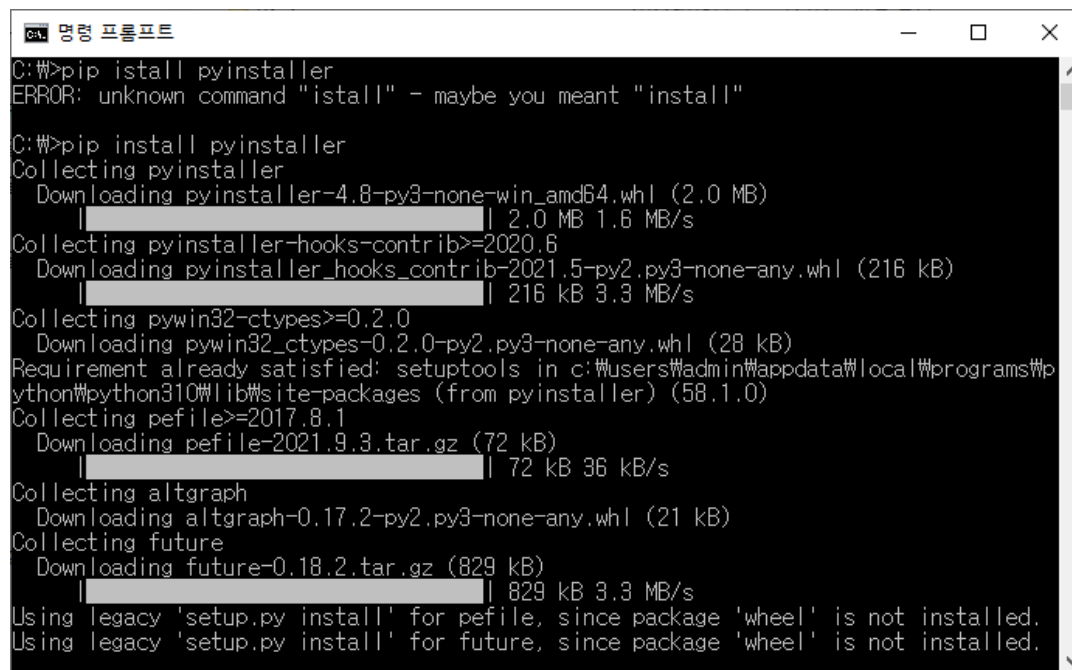
```
C:\>pip install pyinstaller
ERROR: unknown command "install" - maybe you meant "install"

C:\>pip install pyinstaller
Collecting pyinstaller
  Downloading pyinstaller-4.8-py3-none-win_amd64.whl (2.0 MB)
    | 2.0 MB 1.6 MB/s
Collecting pyinstaller-hooks-contrib>=2020.6
  Downloading pyinstaller_hooks_contrib-2021.5-py2.py3-none-any.whl (216 kB)
    | 216 kB 3.3 MB/s
Collecting pywin32-ctypes>=0.2.0
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Requirement already satisfied: setuptools in c:\users\admin\appdata\local\programs\python\python310\lib\site-packages (from pyinstaller) (58.1.0)
Collecting pefile>=2017.8.1
  Downloading pefile-2021.9.3.tar.gz (72 kB)
    | 72 kB 36 kB/s
Collecting altgraph
  Downloading altgraph-0.17.2-py2.py3-none-any.whl (21 kB)
Collecting future
  Downloading future-0.18.2.tar.gz (829 kB)
    | 829 kB 3.3 MB/s
Using legacy 'setup.py install' for pefile, since package 'wheel' is not installed.
Using legacy 'setup.py install' for future, since package 'wheel' is not installed.
```

## 06. cx\_Oracle 설치

### [cx\_Oracle 설치]

- 명령프롬프트다음 명령어를 실행하여 cx\_Oracle 패키지를 설치  
➤ pip install cx\_Oracle --upgrade



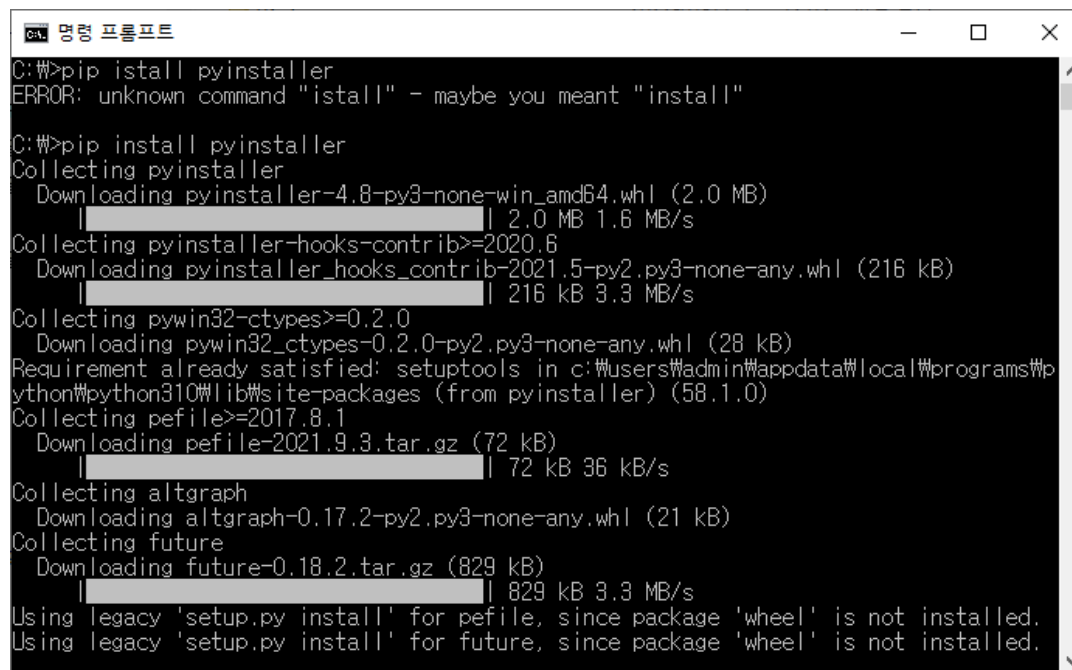
```
명령 프롬프트
C:\>pip install pyinstaller
ERROR: unknown command "install" - maybe you meant "install"

C:\>pip install pyinstaller
Collecting pyinstaller
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    |#####| 72 kB 36 kB/s
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Collecting future
  Downloading future-0.18.2.tar.gz (829 kB)
    |#####| 829 kB 3.3 MB/s
Using legacy 'setup.py install' for pefile, since package 'wheel' is not installed.
Using legacy 'setup.py install' for future, since package 'wheel' is not installed.
```

## 07. oracledb 설치

### [oracledb 설치]

- 명령프롬프트다음 명령어를 실행하여 oracledb 패키지를 설치  
➤ pip install oracledb --upgrade



```
명령 프롬프트
C:\>pip install pyinstaller
ERROR: unknown command "install" - maybe you meant "install"

C:\>pip install pyinstaller
Collecting pyinstaller
  Downloading pyinstaller-4.8-py3-none-win_amd64.whl (2.0 MB)
    | 2.0 MB 1.6 MB/s
Collecting pyinstaller-hooks-contrib>=2020.6
  Downloading pyinstaller_hooks_contrib-2021.5-py2.py3-none-any.whl (216 kB)
    | 216 kB 3.3 MB/s
Collecting pywin32-ctypes>=0.2.0
  Downloading pywin32-ctypes-0.2.0-py2.py3-none-any.whl (28 kB)
Requirement already satisfied: setuptools in c:\users\admin\appdata\local\programs\python\python310\lib\site-packages (from pyinstaller) (58.1.0)
Collecting pefile>=2017.8.1
  Downloading pefile-2021.9.3.tar.gz (72 kB)
    | 72 kB 36 kB/s
Collecting altgraph
  Downloading altgraph-0.17.2-py2.py3-none-any.whl (21 kB)
Collecting future
  Downloading future-0.18.2.tar.gz (829 kB)
    | 829 kB 3.3 MB/s
Using legacy 'setup.py install' for pefile, since package 'wheel' is not installed.
Using legacy 'setup.py install' for future, since package 'wheel' is not installed.
```

## 08. 기타 SW

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### [기타 SW]

- 캡처도구

## 09. 기타 요구사항

---

### [시작 화면에 고정]

- IDLE 셸
- Pytham



# Thank You !

[Python]