

# 빅데이터 분석의 기초

조상구

# 10주차~ 11주차 Syllabus

- ◇ Python 기본 문법 배우기 (3hr)
- ◇ Pandas\_python\_syntax\_pandas (3hr)
- ◇ 시각화(지도)\_matplotlib\_seaborn\_실습하기 (3hr)
- ◇ chatGTP로 머신러닝 알고리즘과 모델 (3hr)
- ◇ chatGTP로 딥러닝 모델 (3hr)





# 10주차~ 11주차 실습과제

## ◇ 실습 과제

The screenshot shows the GitHub interface for a repository named '24\_spring\_big-data-analysis'. The repository is public and has 1 branch (main) and 0 tags. The commit history shows a single commit by 'ancestor9' titled 'Add files via upload' from 2 weeks ago, containing 2 commits. The commit message lists several files: 'Task\_01\_week\_1-3.ipynb', 'Task\_02\_week\_4-6.ipynb', 'Task\_03\_week\_7-8.ipynb', 'Task\_04\_week\_9-11\_Task\_03\_similar.ipynb', 'Task\_05\_week\_11-12.ipynb', 'Task\_06\_week\_13-15.ipynb', and 'week9\_python syntax\_pandas.pdf'. Each file is accompanied by a link to 'Add files via upload' and a timestamp of '2 weeks ago'.

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

24\_spring\_big-data-analysis Public Pin Unwatch 1

main 1 Branch 0 Tags Go to file Add file <> Code

ancestor9 Add files via upload f4e6051 · 2 weeks ago 2 Commits

Task_01_week_1-3.ipynb	Add files via upload	2 weeks ago
Task_02_week_4-6.ipynb	Add files via upload	2 weeks ago
Task_03_week_7-8.ipynb	Add files via upload	2 weeks ago
Task_04_week_9-11_Task_03_similar.ipynb	Add files via upload	2 weeks ago
Task_05_week_11-12.ipynb	Add files via upload	2 weeks ago
Task_06_week_13-15.ipynb	Add files via upload	2 weeks ago
week9_python syntax_pandas.pdf	Add files via upload	2 weeks ago

# 빅데이터 분석의 기초

week 10



# Python download & Installation

1. google colab with jupyter notebook
2. python download
3. vscode with python, jupyter notebook
4. anacoda, miniconda



# Python download & Installation

## 1. 가상환경(Virtual Environment)

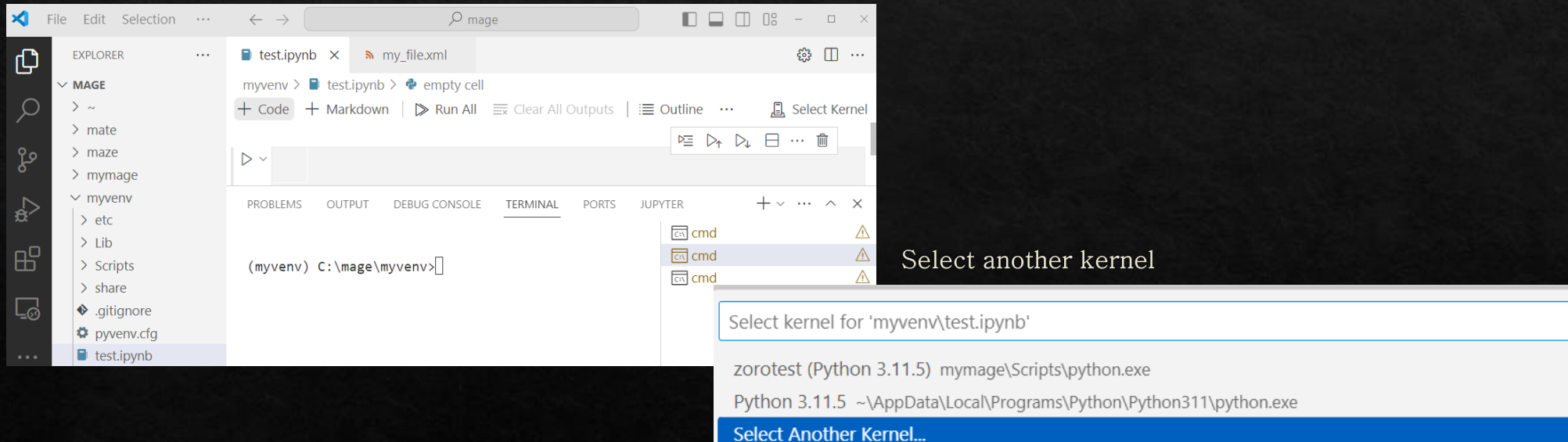
1. python 이 글로벌하게 설치되었다는 가정에서
2. `> mkdir data_mgt`
3. `> cd data_mgt`
4. `data_mgt> python -m venv mage` # mage라는 가상환경을 생성하라
5. `data_mgt> cd mage`
6. `data_mgt\mage>Scripts\activate` # deactivate는 해제
7. `(mage) data_mgt\mage>` # 가상환경 안으로
8. `(mage) data_mgt\mage>pip install mage-ai`

# Jupyter Notebook 설치 @가상환경

```
>> pip install jupyter
>> pip install ipykernel
>> python -m ipykernel install --user --name zoroaster --display-name "zoroaster"
>> pip list
```

Close vscode >> Open vscode

가상환경 디렉토리에서 새로운 test.ipynb 파일을 만들고 오른쪽 끝 “Select Kernel”



myenv > test.ipynb > empty cell

+ Code + Markdown | ▶ Run All | Clear All Outputs | Outline | Select Kernel

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS JUPYTER

(myenv) C:\mage\myenv>

cmd cmd cmd

Select another kernel

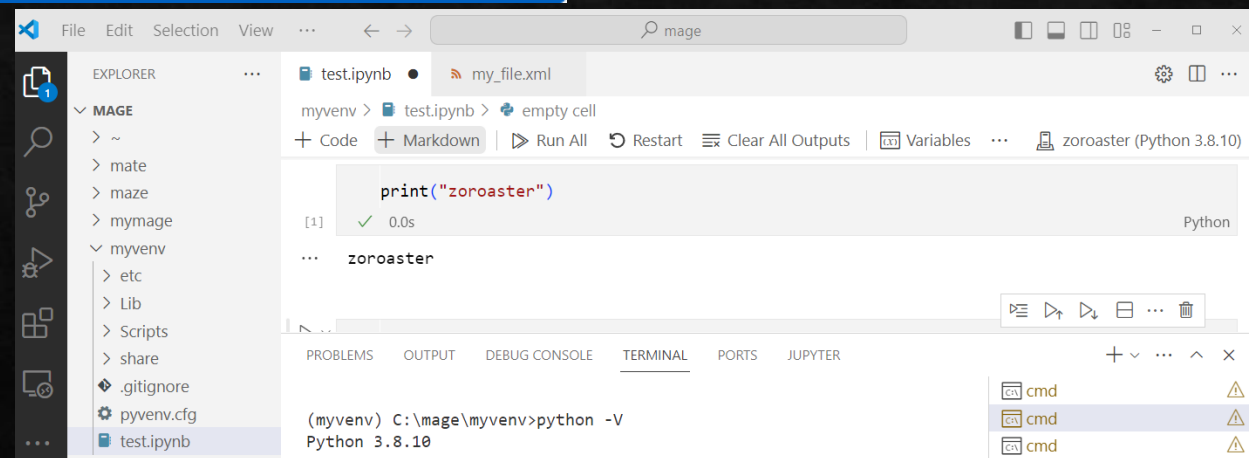
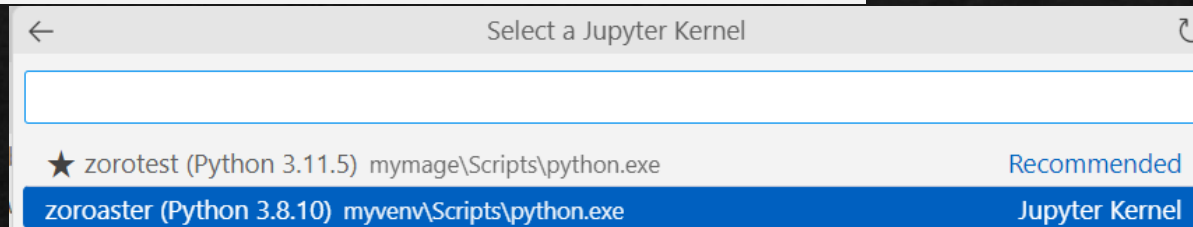
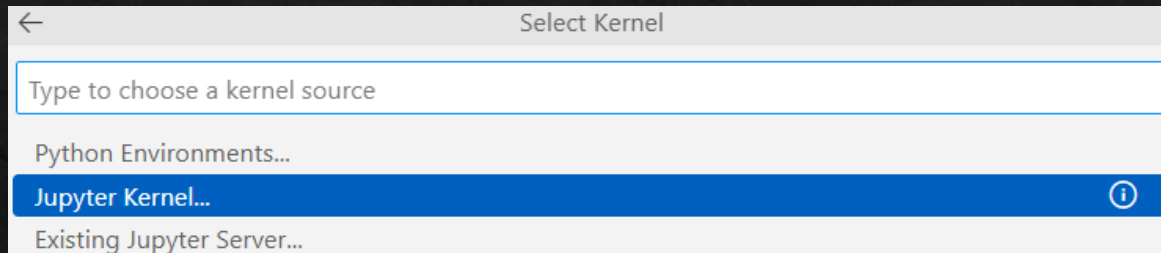
Select kernel for 'myenv\test.ipynb'

zorotest (Python 3.11.5) mymage\Scripts\python.exe

Python 3.11.5 ~\AppData\Local\Programs\Python\Python311\python.exe

Select Another Kernel...

# Jupyter Notebook 설치 @가상환경





# Python Crash Course\_Topic Structure

Task	Single Value	Multiple Values	numpy, pandas
Presentation (value, variable)	int, float, string, boolean	list, tuple, dictionary, set	ndarray, Series, DataFrame
Operation (algebra)	expressions	operations, mutable operations	expressions, get, set, reshape, ...
Control flow		if for in while	
Use and reuse		Functions Standard libraries Modules and Packages	
Input and output	Standard I/O File I/O		Standard I/O File I/O CSV, Excel

# 파이썬 기본문법 배우기

[https://github.com/ancestor9/24\\_spring\\_big-data-analysis/blob/main/week9\\_python%20syntax\\_pandas.pdf](https://github.com/ancestor9/24_spring_big-data-analysis/blob/main/week9_python%20syntax_pandas.pdf)

**파이썬**

**머신러닝**

**실전 도장깨기**

데이터의 수집부터 정제와  
분석, 기계학습 분야  
예측모델의 선정과 평가까지  
실전으로 배우는 실습서

2장. 파이썬 프로그래밍 .....	2
2.1. 연산과 자료형 .....	3
2.2. Numpy와 Pandas .....	3
2.3. 텍스트 처리 .....	3
2.4. 데이터 불러오기 .....	3

# End

