

Jupyter Notebook

🔍 비교 비어 있음

📁 구분 Python

설치

실행

종료

확장 프로그램

설치

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필수 단축키

alias 등록

설치 이슈

설치

- 순서대로 진행

```
MINGW64~/Desktop/SSAFY_EXAMPLE
(Venv)
multicampus@DESKTOP-KVQHCD MINGW64 ~/Desktop/SSAFY_EXAMPLE
$ pip install notebook
```

```
git bash에 [pip install notebook] 입력

MINGW64~/Desktop/ssafy_example
Installing collected packages: ipython-genutils, traitlets, six, pywin32, pyrsis
tent, attrs, wcwidth, tornado, pyzmq, python-dateutil, pyparsing, parso, jupyter
-core, jsonschema, webencodings, pygments, pycparser, prompt-toolkit, pickleshar
e, packaging, nest-asyncio, nbformat, matplotlib-inline, MarkupSafe, jupyter-cli
ent, jedi, decorator, colorama, backcall, async-generator, testpath, pywinpty, p
andocfilters, nbclient, mistune, jupyterlab-pygments, Jinja2, ipython, entrypoint
s, defusedxml, debugpy, cffi, bleach, terminado, Send2Trash, prometheus-client,
nbconvert, ipykernel, argon2-cffi, notebook
Running setup.py install for pandocfilters: started
Running setup.py install for pandocfilters: finished with status 'done'
Successfully installed MarkupSafe-2.0.1 Send2Trash-1.7.1 argon2-cffi-20.1.0 asyn
-generator-1.10.0 attrs-21.2.0 backcall-0.2.0 bleach-3.3.0 cffi-1.14.5 colorama-0
.4.4 debugpy-1.3.0 decorator-5.0.9 defusedxml-0.7.1 entrypoints-0.3 ipykernel-6.
9.1 ipython-7.25.0 ipython-genutils-0.2.0 jedi-0.18.0 Jinja2-3.0.1 jsonschema-3.
2.0 jupyter-client-6.1.12 jupyter-core-4.7.1 jupyterlab-pygments-0.1.2 matplotli
b-inline-0.1.2 mistune-0.8.4 nbclient-0.5.3 nbconvert-6.1.0 nbformat-5.1.3 nest-
asyncio-1.5.1 notebook-6.4.0 packaging-21.0 pandocfilters-1.4.3 parso-0.8.2 pick
leshare-0.7.5 prometheus-client-0.11.0 prompt-toolkit-3.0.19 pycparser-2.20 pygm
ents-2.9.0 pyparsing-2.4.7 pyrsistent-0.18.0 python-dateutil-2.8.1 pywin32-301.1
pywinpty-1.1.3 pyzmq-22.1.0 six-1.16.0 terminado-0.10.1 testpath-0.5.0 tornado-6.
1 traitlets-5.0.5 wcwidth-0.2.5 webencodings-0.5.1

multicampus@DESKTOP-KVQHCD MINGW64 ~/Desktop/ssafy_example
$
```

성공적으로 설치했다는 메시지를 확인(경고 메시지가 있다면 무시)

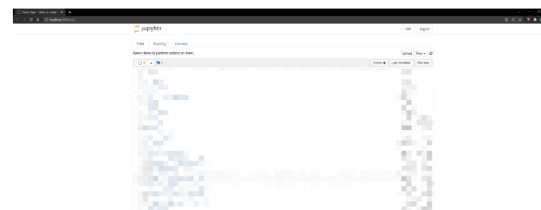
실행

- [주의] 주피터 노트북이 실행 중인 git bash를 종료하지 않도록 주의

- 실행 명령어 - `jupyter notebook`

```
edujunho@DESKTOP-UUA5RJ4 MINGW64 ~/Desktop
$ jupyter notebook
```

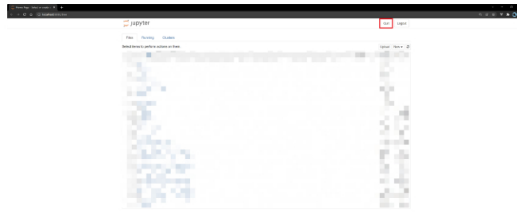
- 실행 화면



종료

1. jupyter 화면에서 종료하는 경우

- 우측상단 **Quit** 클릭



2. 터미널에서 종료하는 경우

- 아래 화면(jupyter 서버가 켜진 상태)에서 **ctrl + c** 누르기 (2~3번 정도 연속 입력)
- 되도록 위 방법으로 진행하는 것을 권장

```
[I 17:58:15.182 NotebookApp] Shutting down 0 terminals
edu@junho@DESKTOP-KVQHQCD MINGW64 ~/Desktop
$ jupyter notebook
[I 18:08:22.135 NotebookApp] Serving notebooks from local directory: C:\Users\vedu\Junho\Desktop
[I 18:08:22.136 NotebookApp] Jupyter Notebook 6.4.6 is running at:
[I 18:08:22.136 NotebookApp] http://localhost:8888/?token=bbeac144f2f158f9761b477b3dbd0b4b630c9a02784a55db
[I 18:08:22.136 NotebookApp] or http://127.0.0.1:8888/?token=bbeac144f2f158f9761b477b3dbd0b4b630c9a02784a55db
[I 18:08:22.136 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 18:08:22.211 NotebookApp]

To access the notebook, open this file in a browser:
file:///C:/Users/edu/junho/AppData/Roaming/jupyter/runtime/nbserver-10780-open.html
Or copy and paste one of these URLs:
http://localhost:8888/?token=bbeac144f2f158f9761b477b3dbd0b4b630c9a02784a55db
or http://127.0.0.1:8888/?token=bbeac144f2f158f9761b477b3dbd0b4b630c9a02784a55db
```

확장 프로그램

설치

1. nbextensions

```
$ pip install jupyter_contrib_nbextensions
```

```
MINGW64/C:/Users/multicampus/Desktop/ssafy_example
(MINGW64)
multicampus@DESKTOP-KVQHQCD MINGW64 ~/Desktop/ssafy_example
$ pip install jupyter_contrib_nbextensions

Requirement already satisfied: wcwidth in c:\users\multicampus\desktop\ssafy_example\venv\lib\site-packages (from prompt-toolkit==3.0.0,!=3.0.1,<3.1.0,>=2.0.0->ipython->jupyter-latex-envs==1.3.8->jupyter_contrib_nbextensions) (0.2.5)
Requirement already satisfied: pyparsing==2.0.2 in c:\users\multicampus\desktop\ssafy_example\venv\lib\site-packages (from packaging->bleach->nbconvert==4.2->jupyter_contrib_nbextensions) (2.4.7)
Using legacy 'setup.py install' for jupyter-latex-envs, since package 'wheel' is not installed.
Using legacy 'setup.py install' for jupyter-nbextensions-configurator, since package 'wheel' is not installed.
Installing collected packages: pyyaml, jupyter-contrib-core, lxml, jupyter-nbextensions-configurator, jupyter-latex-envs, jupyter-highlight-selected-word, jupyter-contrib-nbextensions
Running setup.py install for jupyter-nbextensions-configurator: started
Running setup.py install for jupyter-nbextensions-configurator: finished with status 'done'
Running setup.py install for jupyter-latex-envs: started
Running setup.py install for jupyter-latex-envs: finished with status 'done'
Successfully installed jupyter-contrib-core-0.3.3 jupyter-contrib-nbextensions-0.5.1 jupyter-highlight-selected-word-0.2.0 jupyter-latex-envs-1.4.6 jupyter-nbextensions-configurator-0.4.1 lxml-4.6.3 pyyaml-5.4.1
(MINGW64)
multicampus@DESKTOP-KVQHQCD MINGW64 ~/Desktop/ssafy_example
$
```

Successfully installed 확인

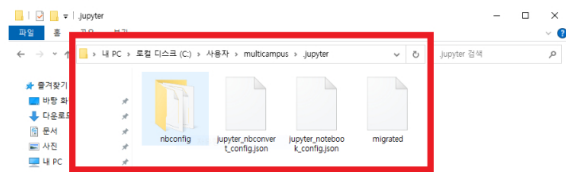
2. css, js files

```
$ jupyter contrib nbextension install --user
```

```
MINGW64/C:/Users/multicampus/Desktop/ssafy_example
(MINGW64)
multicampus@DESKTOP-KVQHQCD MINGW64 ~/Desktop/ssafy_example
$ jupyter contrib nbextension install --user
```



설치완료 확인

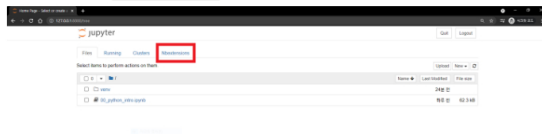


C드라이브 - 사용자 - 유저네임 - .jupyter 폴더 생성 확인

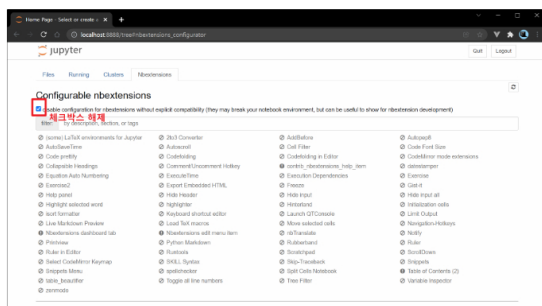
1. jupyter command not found

확장프로그램 활성화

- 확장프로그램 명 : Table of Contents



노트북 메인페이지 → nbextensions 선택



disable configuration 체크박스 해제

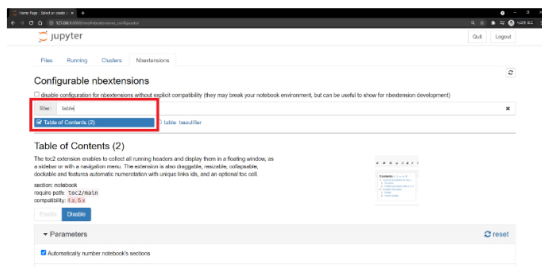
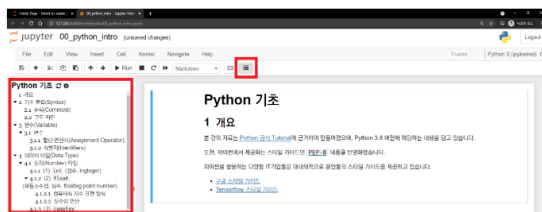


Table 검색 → Table of Contents 선택



확장프로그램 사용하기

기본 사용 가이드

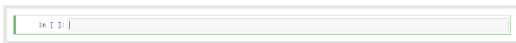
시작하기 전

- Jupyter notebook에는 2가지 모드가 있음
 - 파란색 - Command Mode



셀에 입력할 수 없으며 특정 명령어를 통해 수행하는 상태

- 초록색 - Edit Mode



셀에 데이터를 입력하는 상태

필수 단축키

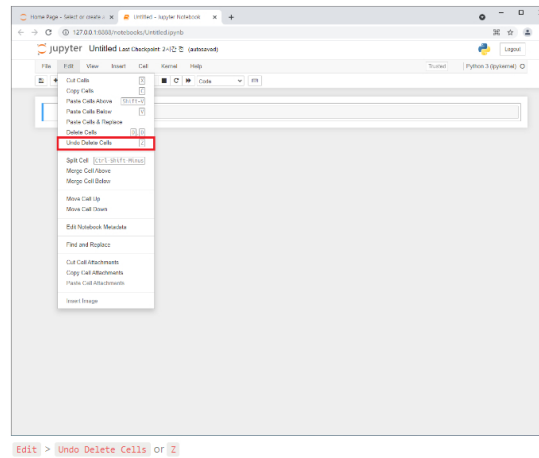
Default view

단축키 목록 1

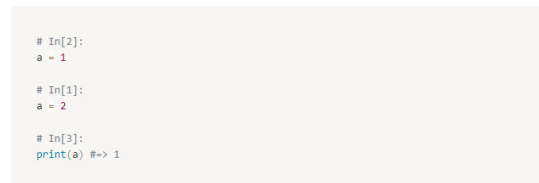
단축키	기능	Name
H	단축키 목록 출력	
A	상단 셀 생성	
B	하단 셀 생성	
클릭 or enter	Edit Mode로 전환	
esc	Command Mode로 전환	
가위 아이콘 or X	셀 삭제	
ctrl + enter	현재 셀 실행	
shift + enter	실행 + 다음 셀 선택 (없다면 생성)	
alt + enter	실행 + 다음 셀 생성	
H	마크다운 셀로 변경	
Y	코드 셀로 변경	
ctrl + s or S	저장	

개수 12

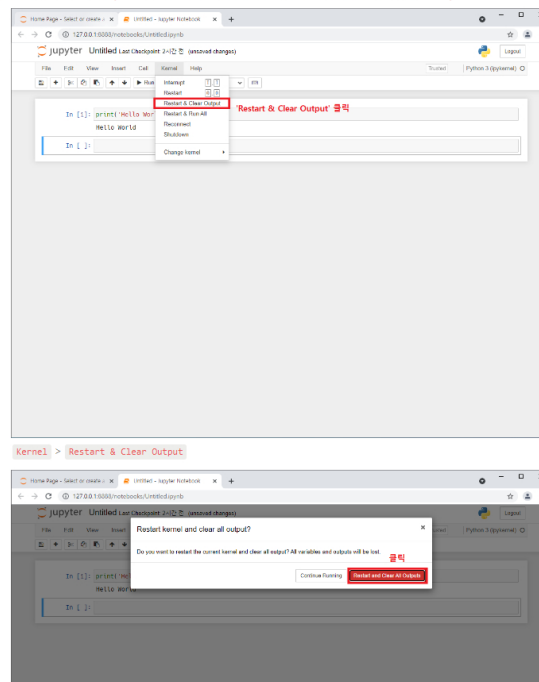
• 삭제 취소

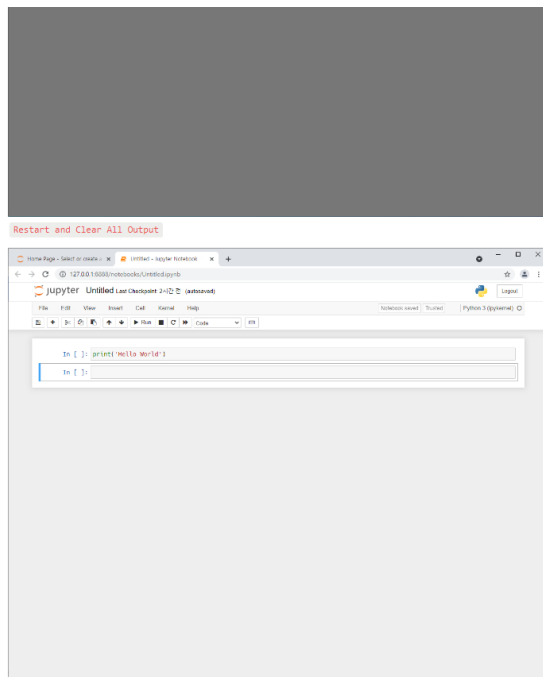


• In[3] : In안의 숫자 == 셀의 실행 순서 (카운트)



• 재시작 및 초기화 (쥬피터 노트북에 문제가 생기면 대부분 이 방식으로 해결 됨)



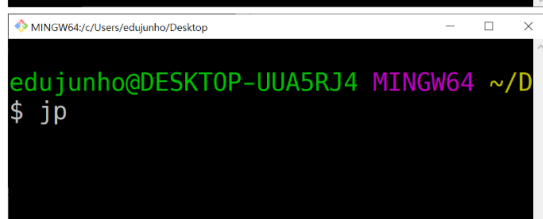
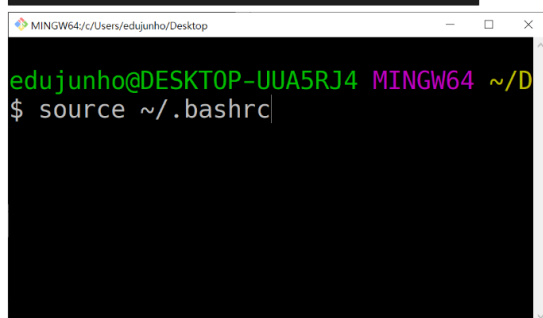
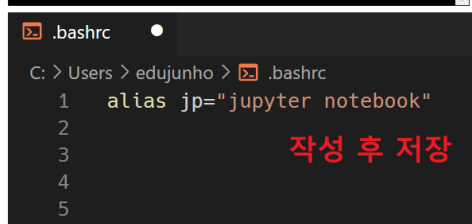
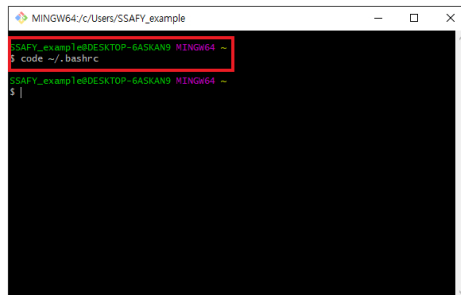


초기화 된 모습 확인

alias 등록

- ★ jupyter notebook 명령어를 jp 로 변경하기
* macOS는 ~/.bashrc가 아닌 ~/.zshrc 에서 진행

- 순서대로 진행





notebook 실행 확인

설치 이슈

1. 노트북 실행 시 `jupyter command not found` 가 출력되는 경우

- python package 전체 삭제 후 재설치

```
$ pip freeze | xargs pip uninstall -y
```

```
$ pip install notebook
```

- 그외 아나콘다 등 제대로 삭제되지 않는 다른 패키지 및 라이브러리의 영향일 경우 파이썬 재설치 권장