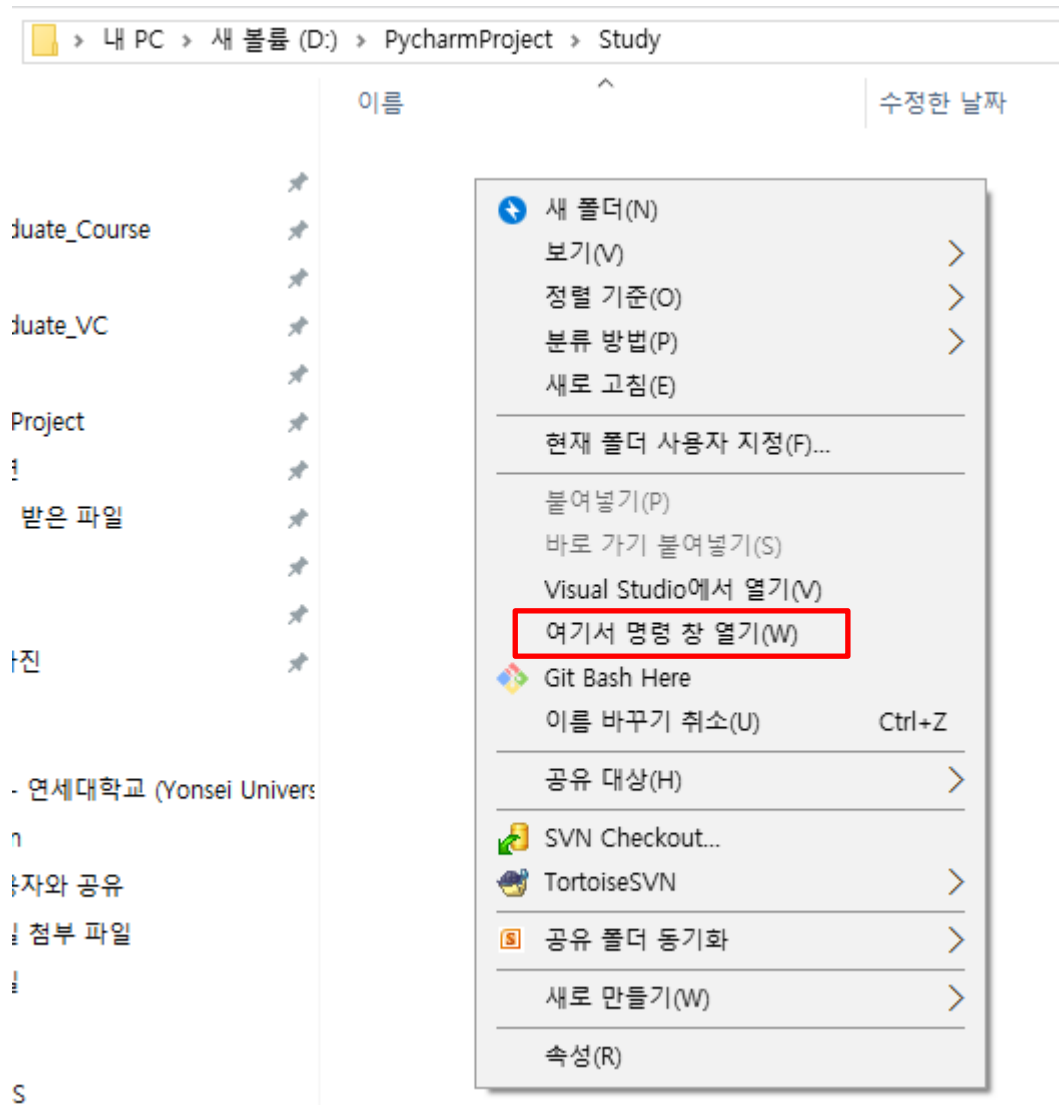


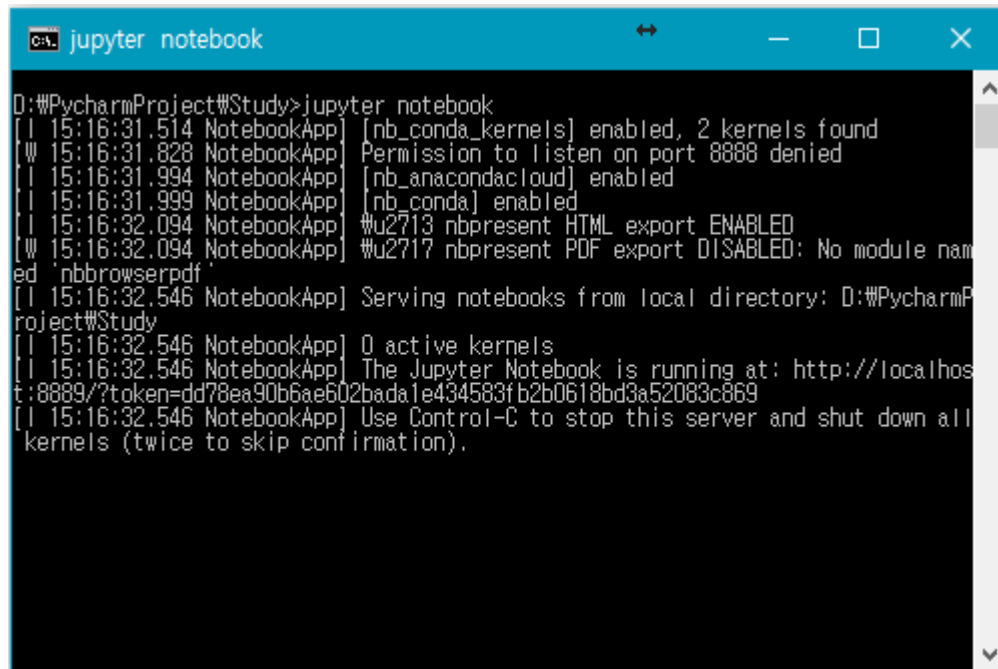
Jupyter Notebook 간단 사용법



작업 경로에서
Shift + 우클릭

명령 창 열기

Anaconda 설치가 되어 있다면
아래처럼 jupyter notebook을 치면
Web 창에 실행된다

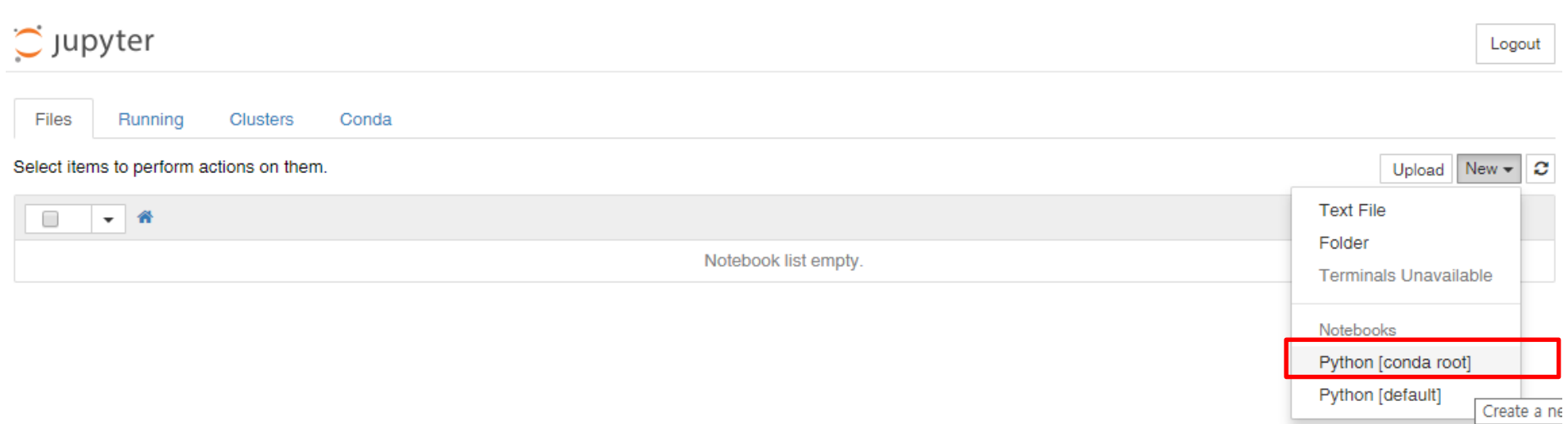


```
C:\> jupyter notebook

D:\PycharmProject\Study>jupyter notebook
[I 15:16:31.514 NotebookApp] [nb_conda_kernels] enabled, 2 kernels found
[W 15:16:31.828 NotebookApp] Permission to listen on port 8888 denied
[I 15:16:31.994 NotebookApp] [nb_anacondacloud] enabled
[I 15:16:31.999 NotebookApp] [nb_conda] enabled
[I 15:16:32.094 NotebookApp] #u2713 nbpresent HTML export ENABLED
[W 15:16:32.094 NotebookApp] #u2717 nbpresent PDF export DISABLED: No module named 'nbbrowserpdf'
[I 15:16:32.546 NotebookApp] Serving notebooks from local directory: D:\PycharmProject\Study
[I 15:16:32.546 NotebookApp] 0 active kernels
[I 15:16:32.546 NotebookApp] The Jupyter Notebook is running at: http://localhost:8889/?token=dd78ea90b6ae602bada1e434583fb2b0618bd3a52083c869
[I 15:16:32.546 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
```

실행된 모습.

우측의 New -> Conda root로 새 파일을 만든다



The image shows the JupyterLab web interface. At the top left is the Jupyter logo and the word 'jupyter'. At the top right is a 'Logout' button. Below the header is a navigation bar with tabs for 'Files', 'Running', 'Clusters', and 'Conda'. Below the navigation bar is a message 'Select items to perform actions on them.' and a toolbar with 'Upload', 'New', and a refresh icon. The main area shows a file browser with a home icon and a message 'Notebook list empty.' A dropdown menu is open from the 'New' button, showing options: 'Text File', 'Folder', 'Terminals Unavailable', 'Notebooks', 'Python [conda root]', and 'Python [default]'. The 'Python [conda root]' option is highlighted with a red rectangle. A 'Create a new' button is visible at the bottom right of the dropdown menu.

jupyter

Logout

Files Running Clusters Conda

Select items to perform actions on them.

Upload New

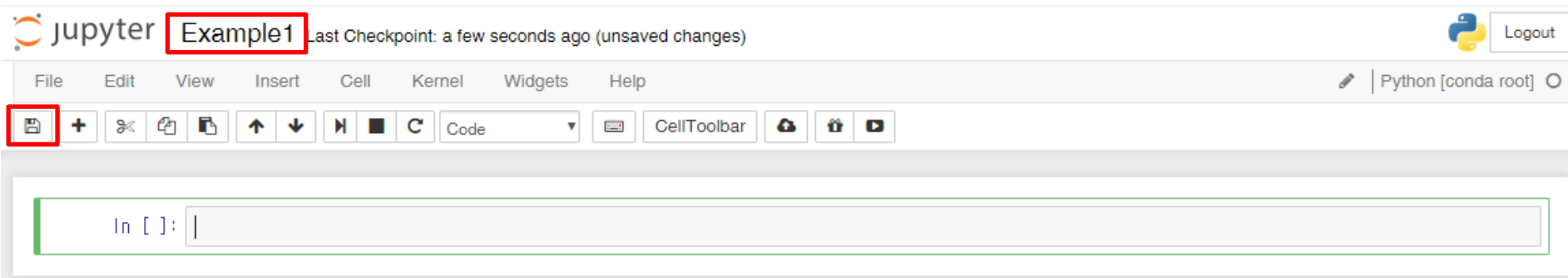
Notebook list empty.

Text File
Folder
Terminals Unavailable
Notebooks
Python [conda root]
Python [default]

Create a new

파일 이름 설정 (Example1)

자동 저장되지 않으므로 저장 (또는 Ctrl+S) 습관화



Notebook 파일의 확장자는 .ipynb

다음과 같이 한 줄 씩 코딩이 가능하다
(Python은 Script 언어이기 때문)

실행 시에는 Ctrl+Enter를 누르면 된다

```
In [1]: import numpy as np
```

```
In [2]: np.__version__
```

```
Out[2]: '1.11.3'
```

```
In [3]: print("Hello World!")
```

```
Hello World!
```

```
In [ ]: |
```

```
In [4]: a = np.zeros((2,4))  
print(a)
```

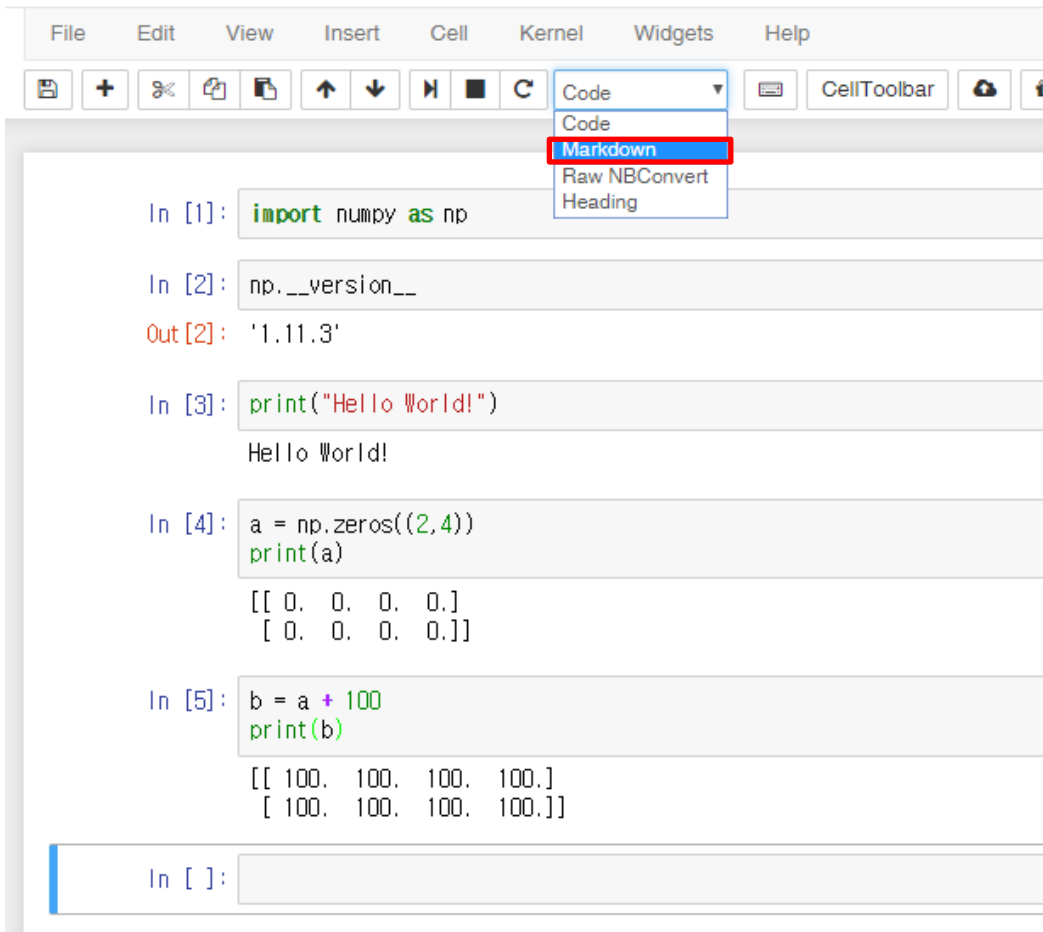
```
[[ 0.  0.  0.  0.]  
 [ 0.  0.  0.  0.]]
```

```
In [5]: b = a + 100  
print(b)
```

```
[[ 100.  100.  100.  100.]  
 [ 100.  100.  100.  100.]]
```

다음과 같이 한 줄 (또는 Block단위로)
코딩이 가능하다
(Python은 Script 언어이기 때문)

실행 시에는 Ctrl+Enter를 누르면 된다



The screenshot shows the Jupyter Notebook interface. At the top, there is a menu bar with 'File', 'Edit', 'View', 'Insert', 'Cell', 'Kernel', 'Widgets', and 'Help'. Below the menu bar is a toolbar with various icons. A dropdown menu is open, showing options: 'Code', 'Markdown', 'Raw NBConvert', and 'Heading'. The 'Markdown' option is highlighted with a red rectangle. The main area of the notebook contains several code cells. The first cell is a code cell with the text 'In [1]: import numpy as np'. The second cell is a code cell with the text 'In [2]: np.__version__'. The output of the second cell is 'Out[2]: '1.11.3''. The third cell is a code cell with the text 'In [3]: print("Hello World!")' and the output is 'Hello World!'. The fourth cell is a code cell with the text 'In [4]: a = np.zeros((2,4))' and 'print(a)', and the output is a 2x4 array of zeros. The fifth cell is a code cell with the text 'In [5]: b = a + 100' and 'print(b)', and the output is a 2x4 array of 100s. The bottom of the notebook shows an empty code cell with the text 'In []: '.

File Edit View Insert Cell Kernel Widgets Help

Code
Code
Markdown
Raw NBConvert
Heading

```
In [1]: import numpy as np
```

```
In [2]: np.__version__
```

```
Out[2]: '1.11.3'
```

```
In [3]: print("Hello World!")
```

```
Hello World!
```

```
In [4]: a = np.zeros((2,4))
print(a)
```

```
[[ 0.  0.  0.  0.]
 [ 0.  0.  0.  0.]]
```

```
In [5]: b = a + 100
print(b)
```

```
[[ 100.  100.  100.  100.]
 [ 100.  100.  100.  100.]]
```

```
In [ ]:
```

Python Code 외에도 서식 형태도 지원한다

```
# Markdown은 서식 언어
```

```
## 중제목
```

```
### 소제목
```

```
#### 소소제목
```

```
- 리스트1
```

```
- 리스트2
```

```
- 리스트3
```

```
그냥 글
```

```
[링크](https://www.yonsei.ac.kr)
```

Markdown은 서식 언어

중제목

소제목

소소제목

- 리스트1
- 리스트2
- 리스트3

그냥 글

링크

Markdown 예제

이와 같이 글과 코드를
섞어서 만들 수 있다.

In []: |