

Jupyter Notebook 실습자료

Jupyter Tutorial

1. What is Jupyter Notebook?

The Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations. Visualizations.

2. Live Code Example

3+3

adding two parameters

def add(a,b):

return a+b

add(3,5)

3. Equation

#sqrt(x^2+y^2+z^2)

This expression $\sqrt{3x-1}+(1+x)^2$ is an example of a TeX inline equation in a [Markdown-formatted](https://daringfireball.net/projects/markdown/) sentence.

[More example click here](https://jupyter-notebook.readthedocs.io/en/stable/examples/Notebook/Typesetting%20Equations.html)

4. Visualization

4.1 image

from IPython.display import Image

Image("https://www.snu.ac.kr/webdata/uploads/kor/image/2019/12/about-symbol-bi_lg.png",
width=200, height=50)

4.2 video

from IPython.display import YouTubeVideo

YouTubeVideo("TDhkrvATsBA")

```
### 4.3 table
```

```
### 4.4 chart
```

```
import matplotlib.pyplot as plt
```

```
plt.plot([1,2,3,4])
```

```
plt.ylabel('result')
```

```
plt.show()
```

```
### 5. Performance check
```

```
%timeit 3+3
```

```
%timeit add(3,3)
```

```
%%timeit
```

```
a = [1,2,3]
```

```
a = [x+1 for x in a]
```

```
%%timeit
```

```
b = [1,2,3]
```

```
for i in range(len(b)):
```

```
    b[i] = b[i] + 1
```