**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