

개발 환경 구축 Jupyter Notebook

Kyungsik Han

본 영상에서 배울 내용

- 개발 환경 구축
 - Anaconda
 - Jupyter Notebook

Anaconda (아나콘다)

<https://www.anaconda.com/products/individual>

[Products ▾](#)[Pricing](#)[Solutions ▾](#)[Resources ▾](#)[Blog](#)[Company ▾](#)

Individual Edition

Your data science toolkit

With over 20 million users worldwide, the open-source Individual Edition (Distribution) is the easiest way to perform Python/R data science and machine learning on a single machine. Developed for solo practitioners, it is the toolkit that equips you to work with thousands of open-source packages and libraries.

[Download](#)

Open Source



Conda Packages



Manage Environments

Anaconda Installers

Windows

Python 3.8

[64-Bit Graphical Installer \(457 MB\)](#)

[32-Bit Graphical Installer \(403 MB\)](#)

MacOS

Python 3.8

[64-Bit Graphical Installer \(435 MB\)](#)

[64-Bit Command Line Installer \(428 MB\)](#)

Linux

Python 3.8

[64-Bit \(x86\) Installer \(529 MB\)](#)

[64-Bit \(Power8 and Power9\) Installer \(279 MB\)](#)

ADDITIONAL INSTALLERS

The [archive](#) has older versions of Anaconda Individual Edition installers. The Miniconda installer homepage can be found [here](#).

Anaconda (아나콘다)

Anaconda Navigator

File Help



Home

Environments

Projects (beta)

Learning

Community








Documentation

Developer Blog

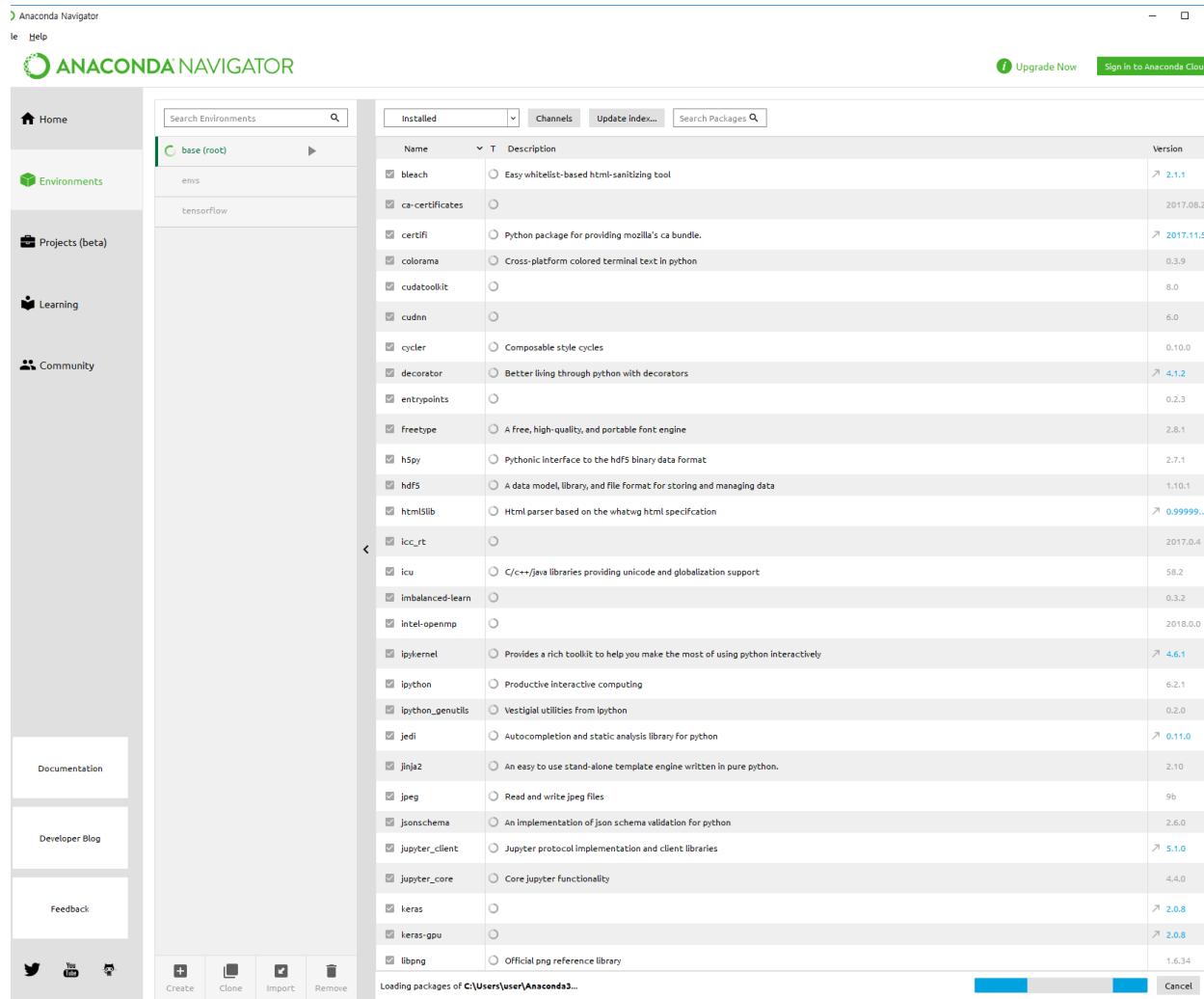
Feedback



Applications on tensorflow Channels

 jupyter notebook 5.2.2 Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis. Launch	 glueviz 0.12.0 Multidimensional data visualization across files. Explore relationships within and among related datasets. Install	 jupyterlab 0.31.8 An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and architecture. Install	 orange3 3.4.1 Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox. Install	 qtconsole 4.3.1 PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more. Install	 rstudio 1.1.383 A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks. Install	 spyder 3.2.6 Scientific Python Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features. Install
--	---	---	--	---	--	---

Anaconda (아나콘다)

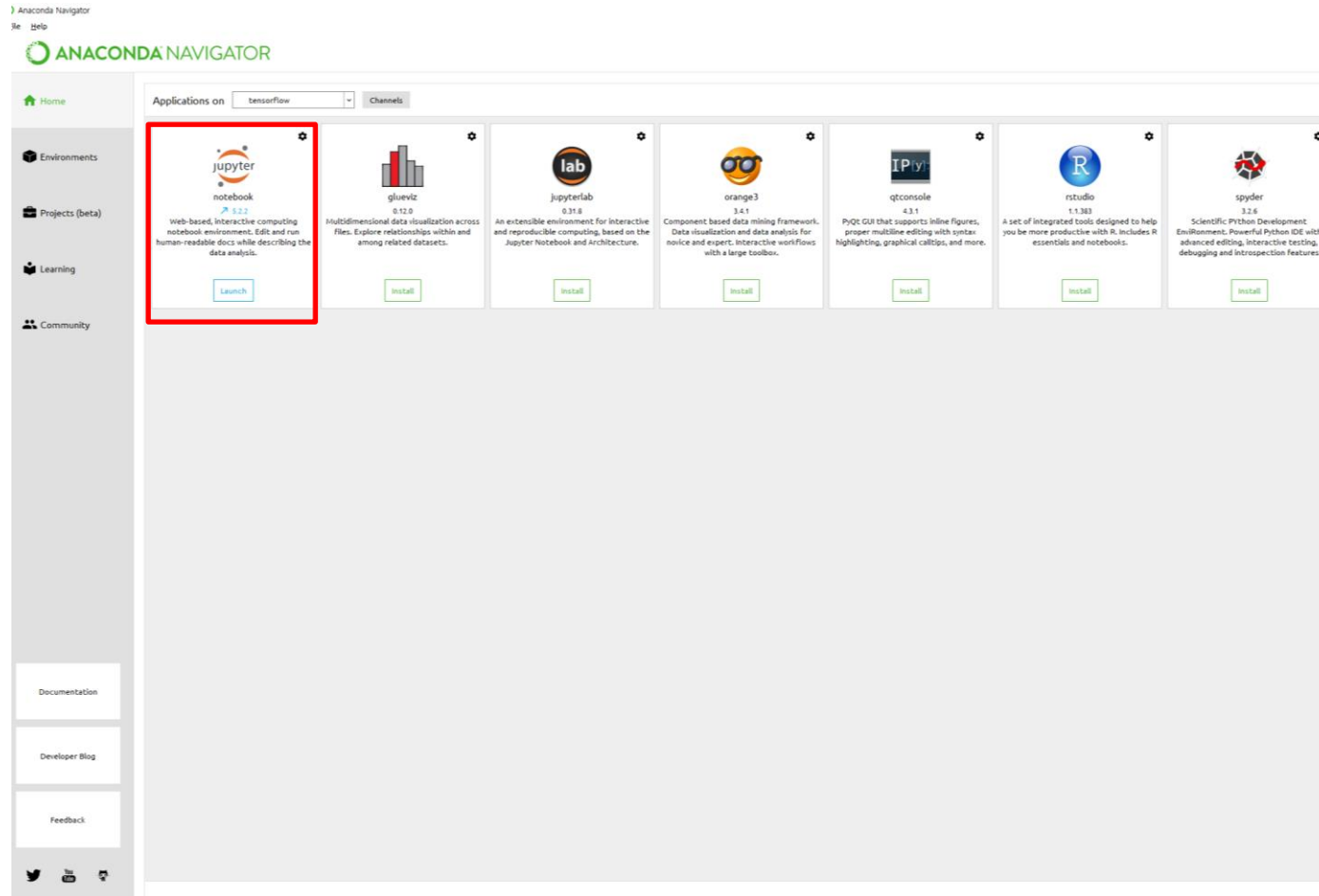


필수 라이브러리 설치

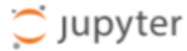
- pandas
- numpy
- scikit-learn
- matplotlib

새로운 라이브러리가
필요할 경우 검색해서
설치할 수 있음

Anaconda – Jupyter Notebook



Anaconda – Jupyter Notebook

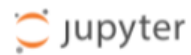
[Logout](#)[Files](#)[Running](#)[Clusters](#)

Select items to perform actions on them.

[Upload](#)[New ▾](#)

<input type="checkbox"/>	<input type="text"/>		Name ↑	Last Modified ↑
<input type="checkbox"/>			3D Objects	6 days ago
<input type="checkbox"/>			Anaconda3	20 hours ago
<input type="checkbox"/>			Contacts	6 days ago
<input type="checkbox"/>			Desktop	10 minutes ago
<input type="checkbox"/>			Documents	an hour ago
<input type="checkbox"/>			Downloads	10 minutes ago
<input type="checkbox"/>			Dropbox	5 days ago
<input type="checkbox"/>			Favorites	6 days ago
<input type="checkbox"/>			Google 드라이브	a day ago
<input type="checkbox"/>			Links	6 days ago
<input type="checkbox"/>			Music	6 days ago

Anaconda – 파일 만들기

[Logout](#)[Files](#)[Running](#)[Clusters](#)

Select items to perform actions on them.

☐ ☐ / Desktop

..

☐ comment_collection

☐ Data

☐ daum_news

[Upload](#)[New](#)

Notebook:

Python 3

Other:

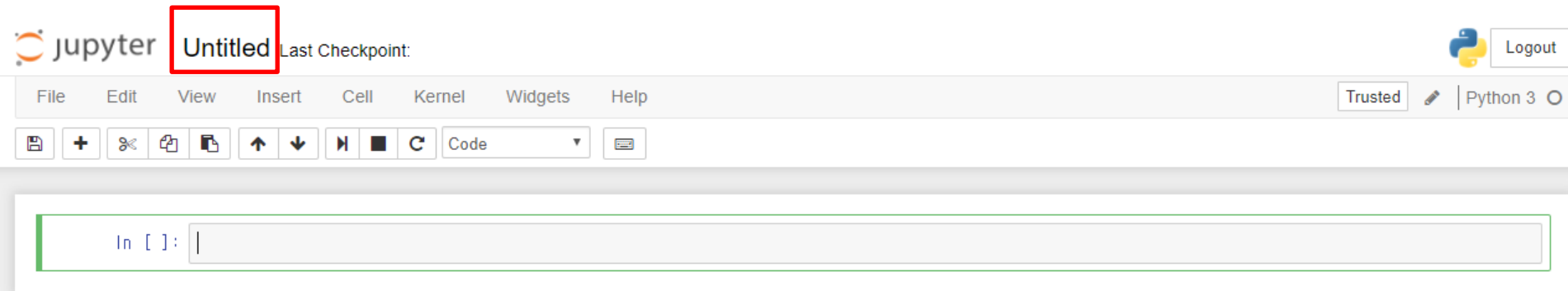
Text File

Folder

Terminals Unavailable

Anaconda – Notebook 기본

파일명 수정



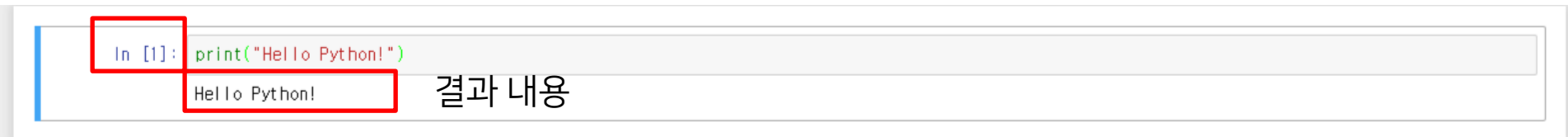
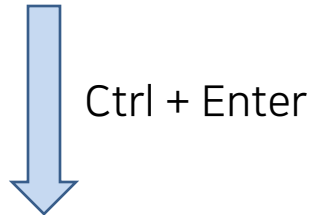
The image shows the Jupyter Notebook interface. At the top left, the Jupyter logo is followed by the text 'jupyter'. To its right, the file name 'Untitled' is displayed and highlighted with a red rectangular box. Further right, the text 'Last Checkpoint:' is visible. On the far right of the top bar, there is a Python logo and a 'Logout' button. Below the top bar is a menu bar with the following items: File, Edit, View, Insert, Cell, Kernel, Widgets, and Help. Below the menu bar is a toolbar containing icons for saving, adding a new file, opening a recent file, copying, pasting, undo, redo, and a dropdown menu currently set to 'Code'. Below the toolbar is a large text area for code input, which currently contains the prompt 'In []: ' followed by a cursor.

jupyter **Untitled** Last Checkpoint:

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

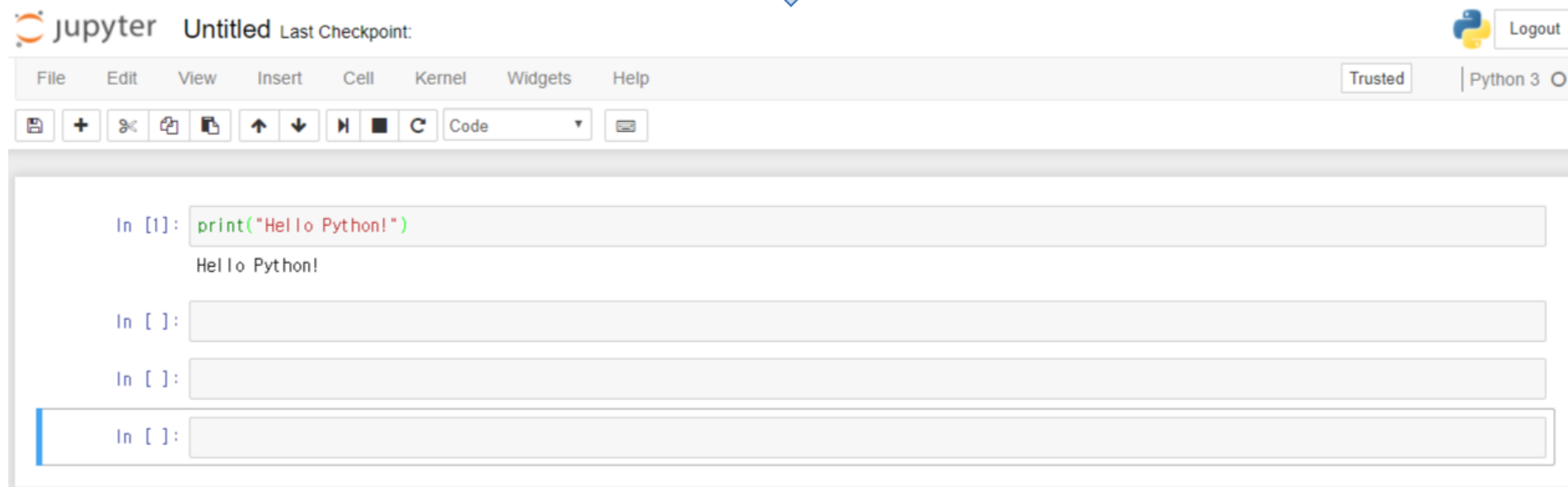
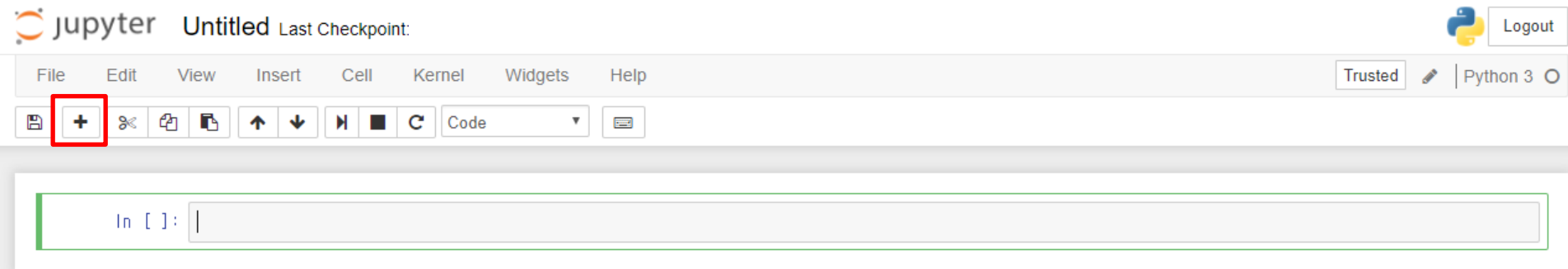
In []: |

Anaconda – Notebook 기본



Ctrl + Enter 나 버튼을 계속 입력하면 숫자가 올라간다

Anaconda – Notebook 기본



Anaconda – Notebook 간단한 코드 작성

```
In [1]: print("Hello Python!")
```

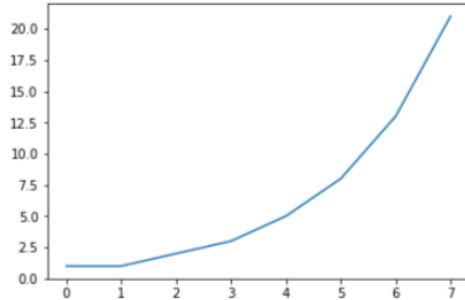
Hello Python!

```
In [2]: import matplotlib.pyplot as plt
        %matplotlib inline
```

```
In [3]: data = [1,1,2,3,5,8,13,21]
```

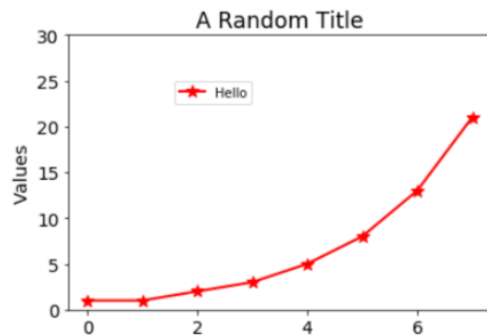
```
In [4]: plt.figure()
        plt.plot(data)
```

```
Out[4]: <matplotlib.lines.Line2D at 0x11b87e460f0>
```



```
In [5]: plt.figure()
        plt.title('A Random Title', size='xx-large')
        plt.ylabel('Values', size='xx-large')
        plt.ylim([0,30])
        plt.plot(data, 'r+-', markersize=10, linewidth=2, label='Hello')
        plt.tick_params(axis='both', which='major', labelsize=14)
        plt.legend(loc=(0.25,0.75), scatterpoints=1)
```

```
Out[5]: <matplotlib.legend.Legend at 0x11b89349908>
```



다음 영상에서 배울 내용

- 파이썬에 대한 기초 내용
- 기초 문법
- 반복문
- 조건문
- 함수

수고하셨습니다.