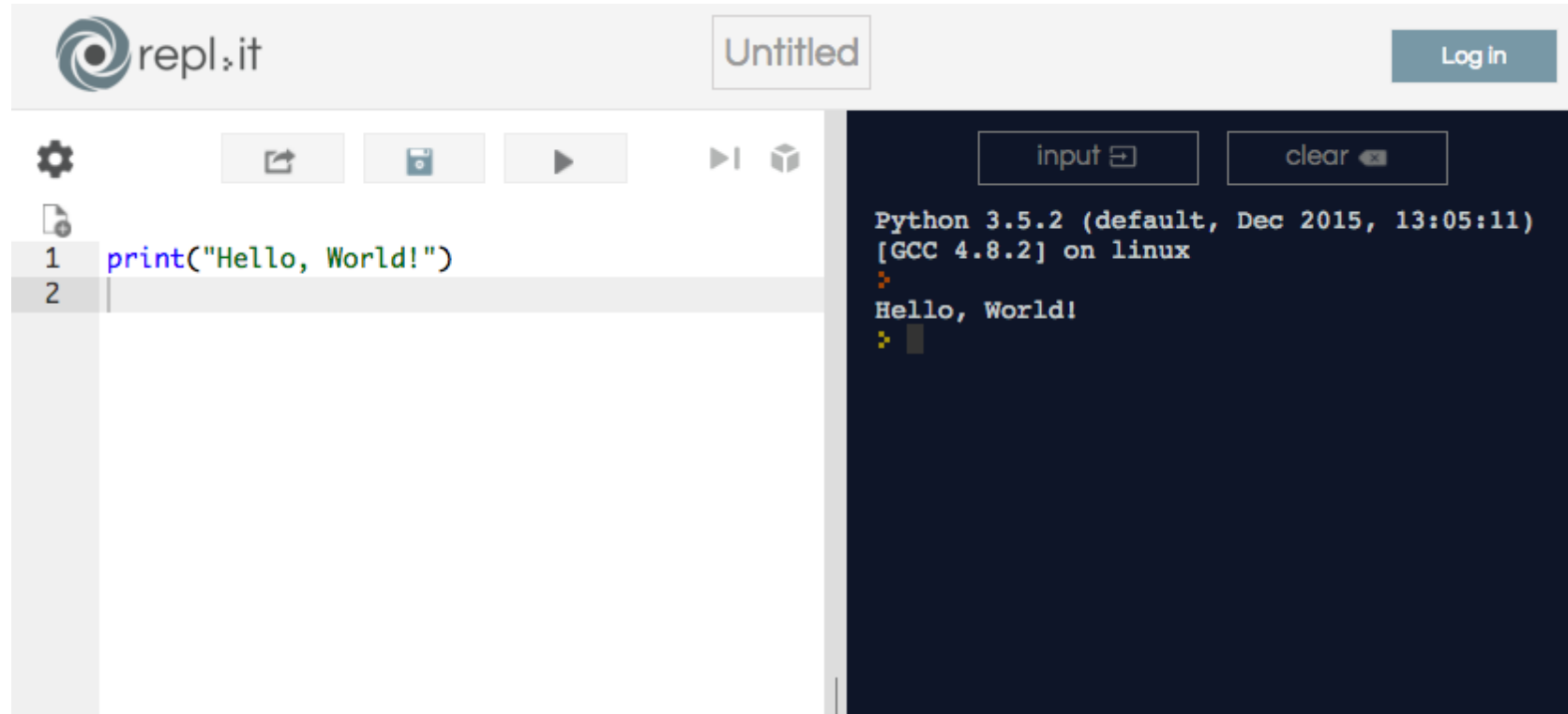


Python Installation Guide

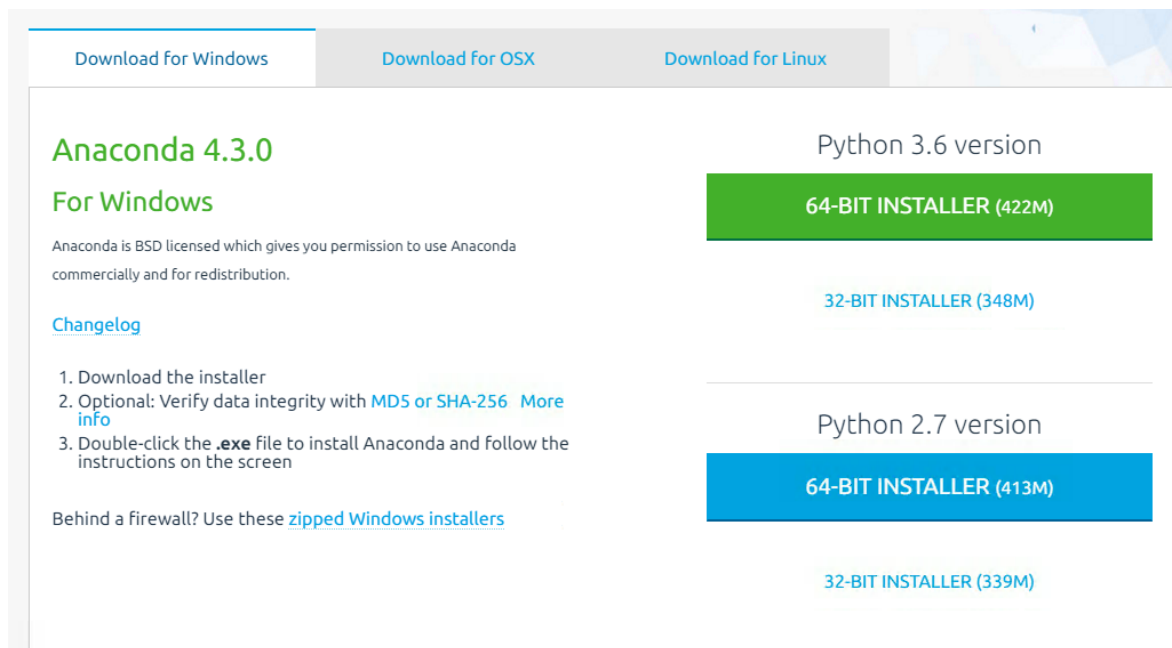
repl.it

- <https://repl.it/languages/python3>



Install Python using Prepackaged Distribution (Anaconda)

- Anaconda ("Anaconda Distribution") is a free, easy-to-install package manager, environment manager, Python distribution, and collection of over 720 open source packages with free community support.
- <https://www.continuum.io/downloads>



The screenshot shows the Anaconda download page for Windows. At the top, there are three tabs: "Download for Windows" (selected), "Download for OSX", and "Download for Linux". Below the tabs, the page is titled "Anaconda 4.3.0 For Windows". It includes a brief description: "Anaconda is BSD licensed which gives you permission to use Anaconda commercially and for redistribution." and a link to the "Changelog". A list of three steps is provided: 1. Download the installer, 2. Optional: Verify data integrity with MD5 or SHA-256 (with a "More info" link), and 3. Double-click the .exe file to install Anaconda and follow the instructions on the screen. At the bottom, it says "Behind a firewall? Use these zipped Windows installers". On the right side, there are two sections for Python versions. The "Python 3.6 version" section has a green button for "64-BIT INSTALLER (422M)" and a link for "32-BIT INSTALLER (348M)". The "Python 2.7 version" section has a blue button for "64-BIT INSTALLER (413M)" and a link for "32-BIT INSTALLER (339M)".

Download for Windows Download for OSX Download for Linux

Anaconda 4.3.0

For Windows

Anaconda is BSD licensed which gives you permission to use Anaconda commercially and for redistribution.

[Changelog](#)

1. Download the installer
2. Optional: Verify data integrity with [MD5 or SHA-256](#) [More info](#)
3. Double-click the .exe file to install Anaconda and follow the instructions on the screen

Behind a firewall? Use these [zipped Windows installers](#)

Python 3.6 version

64-BIT INSTALLER (422M)

[32-BIT INSTALLER \(348M\)](#)

Python 2.7 version

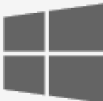

64-BIT INSTALLER (413M)

[32-BIT INSTALLER \(339M\)](#)

Miniconda

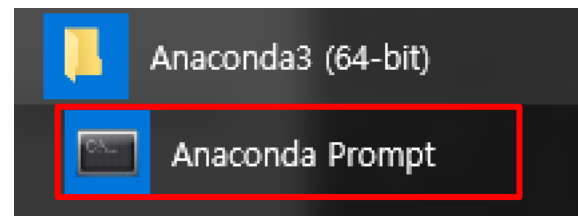
- A mini version of Anaconda that includes just conda and its dependencies
- https://repo.continuum.io/miniconda/Miniconda3-latest-Windows-x86_64.exe


Miniconda

	 Windows	 Mac OS X
Python 3.6	64-bit (exe installer) 32-bit (exe installer)	64-bit (bash installer)
Python 2.7	64-bit (exe installer) 32-bit (exe installer)	64-bit (bash installer)

Miniconda: Install Packages

- `conda install jupyter`
- `conda install pandas pandas-datareader`
- `conda install matplotlib scipy`



 `conda install jupyter`

```
(C:\Users\admin\Miniconda3) C:\Users\admin>conda install jupyter
Fetching package metadata .....
Solving package specifications: .

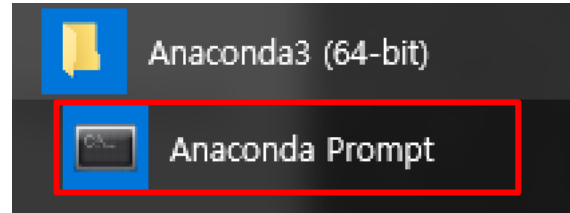
Package plan for installation in environment C:\Users\admin\Miniconda3:

The following NEW packages will be INSTALLED:

bleach:                1.5.0-py36_0
colorama:               0.3.9-py36_0
decorator:              4.0.11-py36_0
entrypoints:            0.2.3-py36_0
html5lib:               0.999-py36_0
icu:                    57.1-vc14_0   [vc14]
ipykernel:              4.6.1-py36_0
ipython:                6.1.0-py36_0
ipython_genutils:       0.2.0-py36_0
```

Run Python Interpreter

- Anaconda Prompt



- Run Python Interpreter

```
Anaconda Prompt - python
(C:\Users\admin\Miniconda3) C:\Users\admin>python
Python 3.6.1 |Continuum Analytics, Inc.| (default, May 11
Type "help", "copyright", "credits" or "license" for more
>>> 1+1
2
>>> 324*424
137376
>>> print("Hello World!")
Hello World!
>>>
```

First Python Program

- Anaconda Prompt
 - Create File: notepad hello.py

Anaconda Prompt

```
(C:\Users\admin\Miniconda3) C:\Users\admin>notepad hello.py
```

- Edit – Save – Exit

hello.py - 메모장

파일(F) 편집(E) 서식(O) 보기(V) 도움말(H)

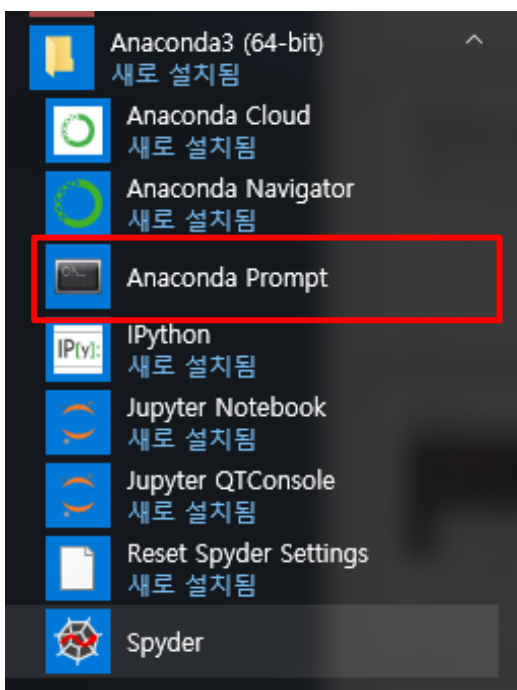
```
print("Hello World!")
```

- Run: python hello.py

Anaconda Prompt

```
(C:\Users\admin\Miniconda3) C:\Users\admin>python hello.py  
Hello World!
```

Run Jupyter

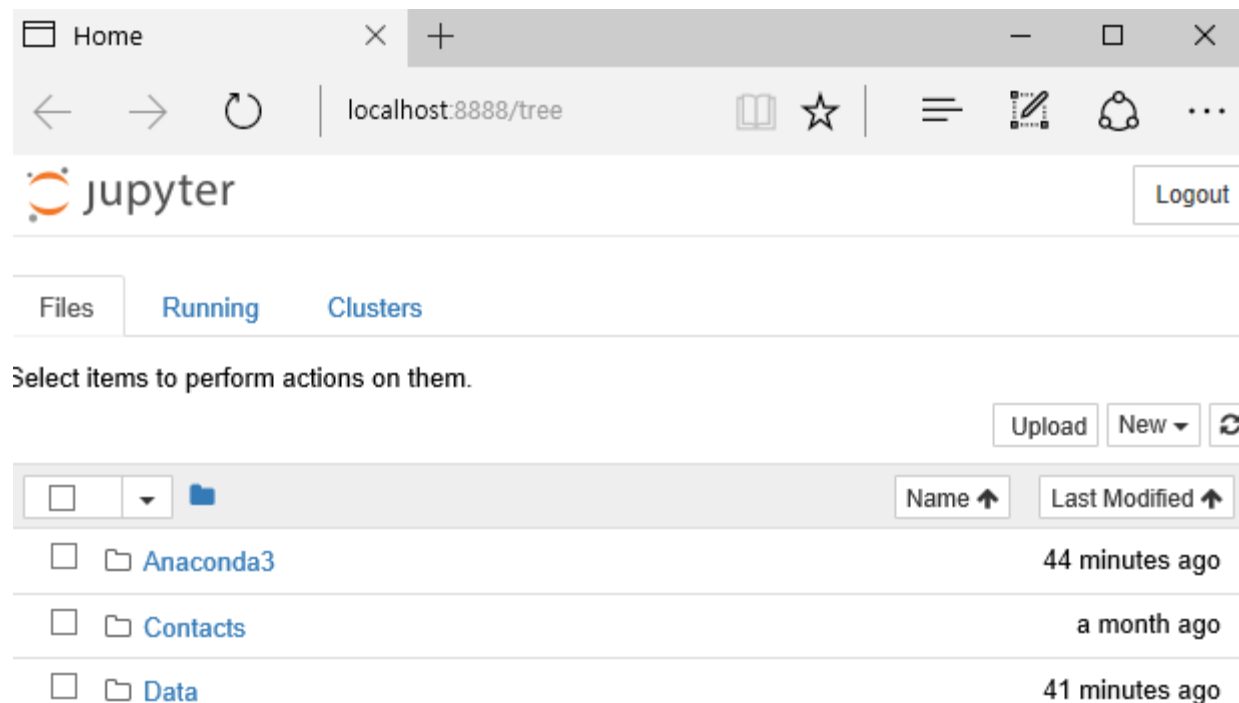
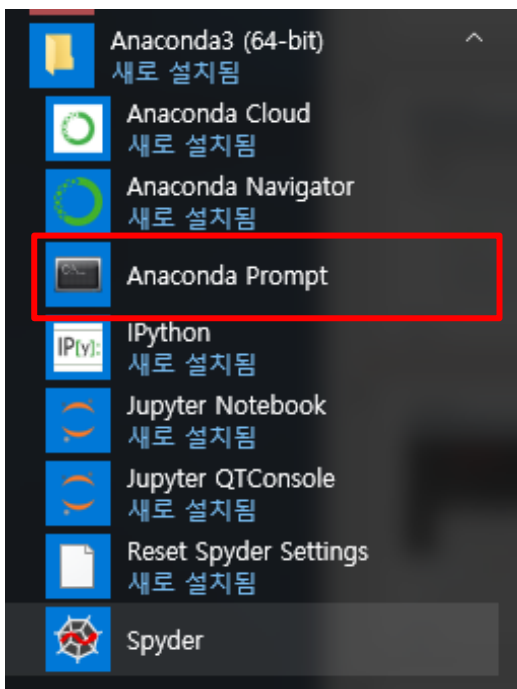


jupyter notebook

```
(C:\Users\admin\Anaconda3) C:\Users\admin>jupyter notebook
[I 02:44:41.686 NotebookApp] Serving notebooks from local directory: C:\Users\admin\Anaconda3
[I 02:44:41.686 NotebookApp] 0 active kernels
[I 02:44:41.686 NotebookApp] The Jupyter Notebook is running at: http://localhost:8888/?token=ed9a9de0db592ea84511ee1d9633245d6da81df70f5fd9a7
[C 02:44:41.686 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation)

Copy/paste this URL into your browser when you connect for the first
time, to login with a token:
http://localhost:8888/?token=ed9a9de0db592ea84511ee1d9633245d6da81df70f5fd9a7
[I 02:44:41.889 NotebookApp] Accepting one-time-token-authenticated connection
```


Run Jupyter



New Notebook

The screenshot displays the JupyterLab web interface. At the top, the Jupyter logo is on the left and a 'Logout' button is on the right. Below the logo are tabs for 'Files', 'Running', and 'Clusters'. The 'Files' tab is active, showing a file browser for the '/ Data' directory. The file list is empty, with the text 'Notebook list empty.' displayed. A 'New' button is visible, and its dropdown menu is open, showing options: 'Notebook: Python 3' (highlighted with a red box), 'Text File', 'Folder', and 'Terminals Unavailable'. Below the file browser, the JupyterLab header shows the Jupyter logo, the text 'Untitled (unsaved changes)', and a 'Logout' button. The main toolbar includes buttons for File, Edit, View, Insert, Cell, Kernel, Widgets, and Help. The 'Code' button is selected, and the kernel is set to 'Python 3'. The code editor area shows a prompt 'In []: |'.

jupyter Logout

Files Running Clusters

Select items to perform actions on them.

Upload New

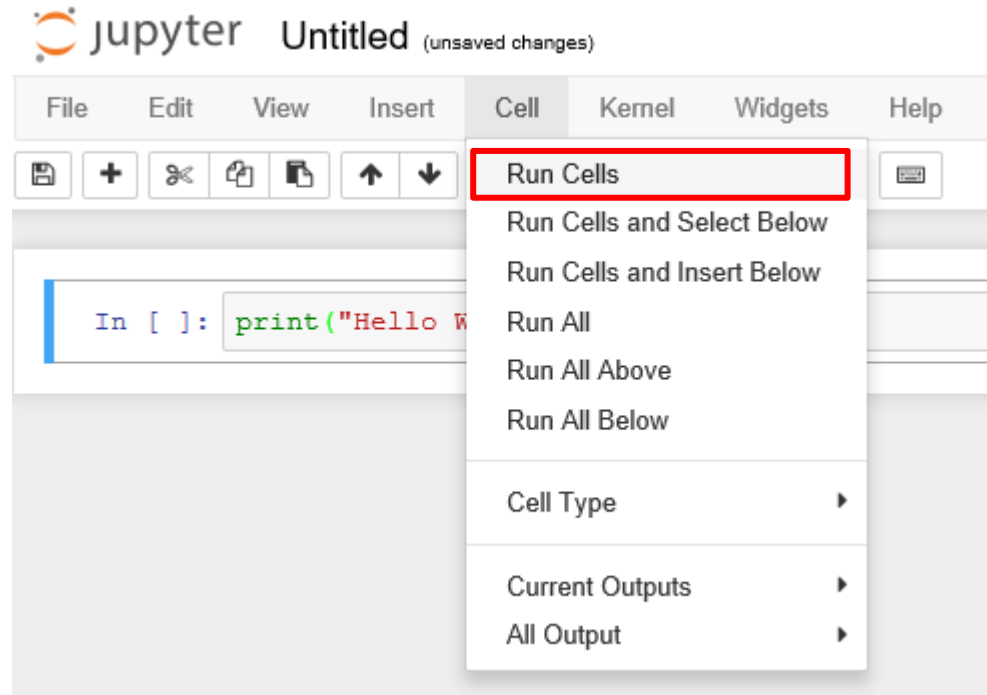
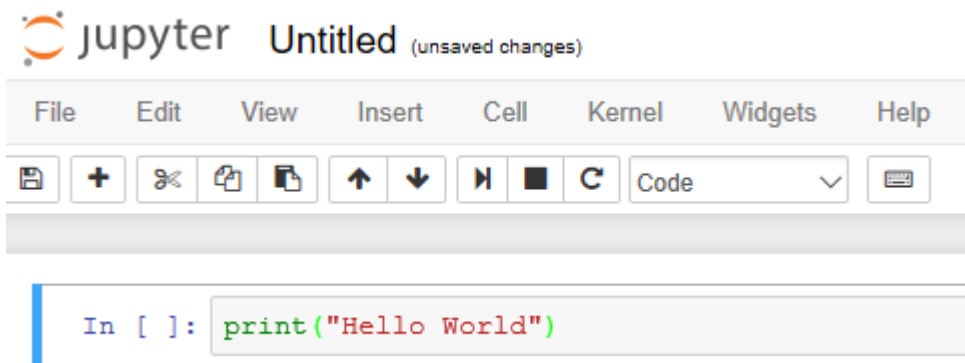
Notebook:
Python 3
Other:
Text File
Folder
Terminals Unavailable

jupyter Untitled (unsaved changes) Logout

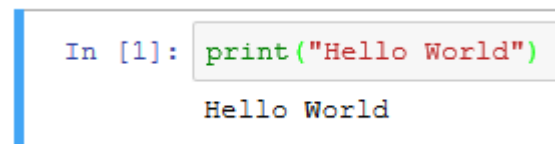
File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

In []: |

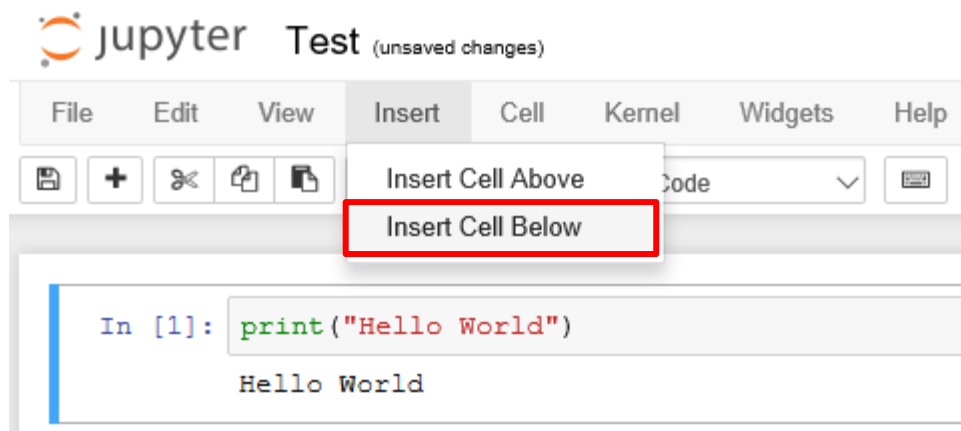
Run Python Code



or Ctrl+Enter

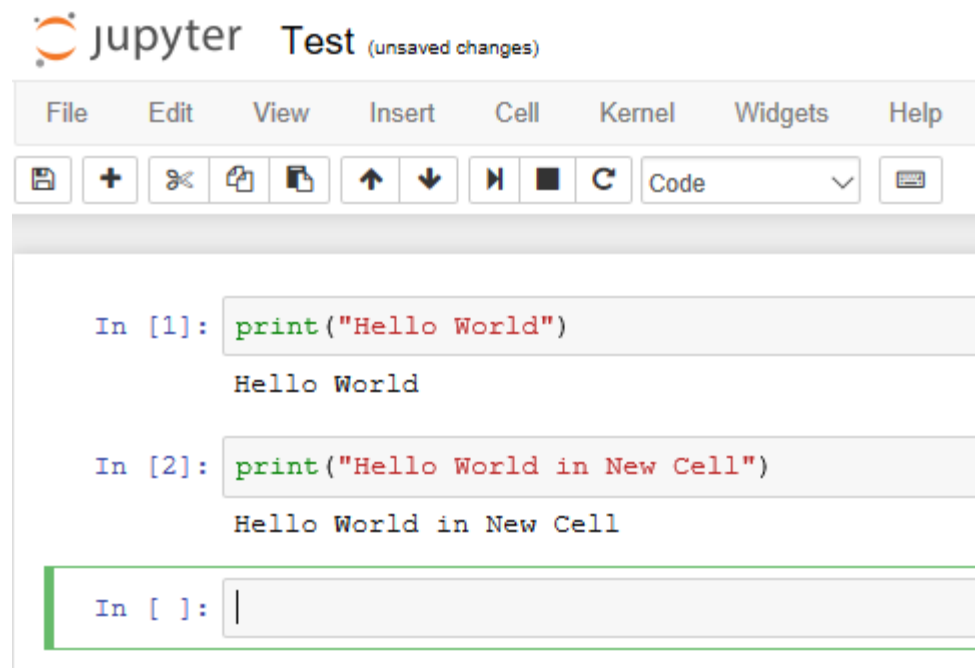


Cell



The image shows the Jupyter Notebook interface with the title "jupyter Test (unsaved changes)". The menu bar includes File, Edit, View, Insert, Cell, Kernel, Widgets, and Help. The Insert menu is open, showing options "Insert Cell Above" and "Insert Cell Below", with "Insert Cell Below" highlighted by a red rectangle. The toolbar contains icons for saving, adding, deleting, copying, and pasting, along with a dropdown menu set to "Code". The code cell contains the following text:

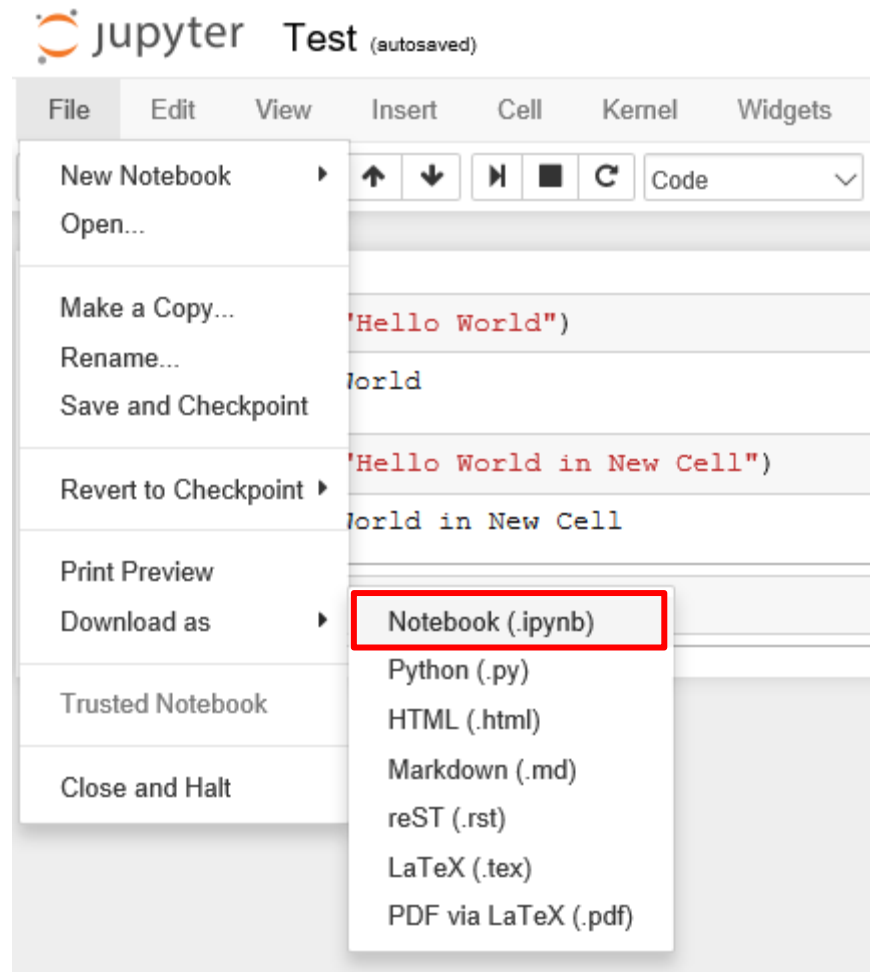
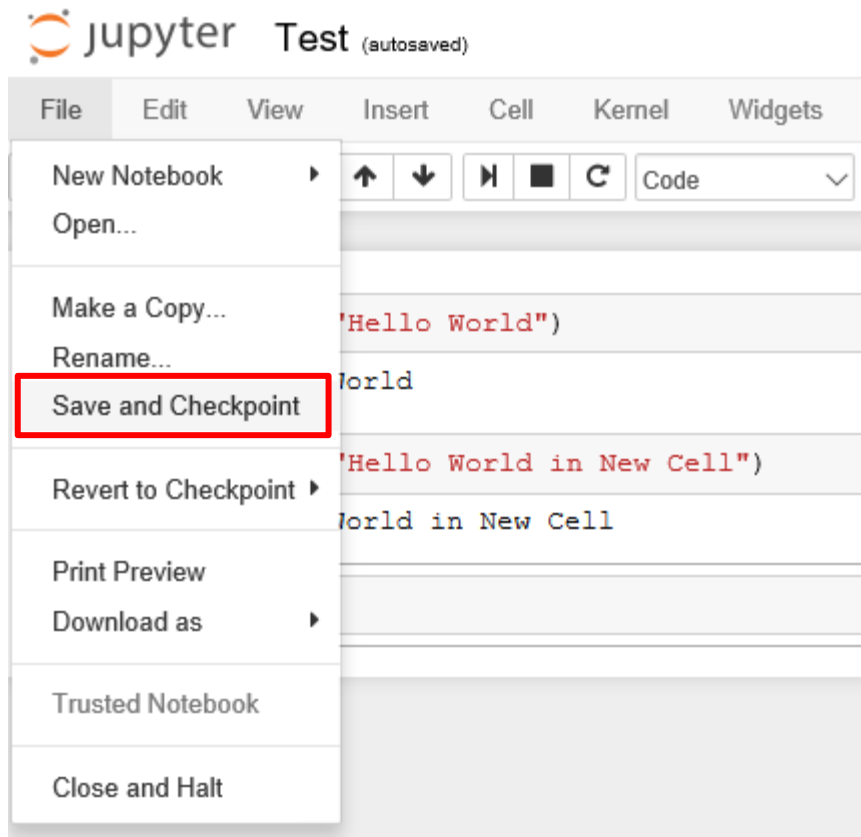
```
In [1]: print("Hello World")  
Hello World
```



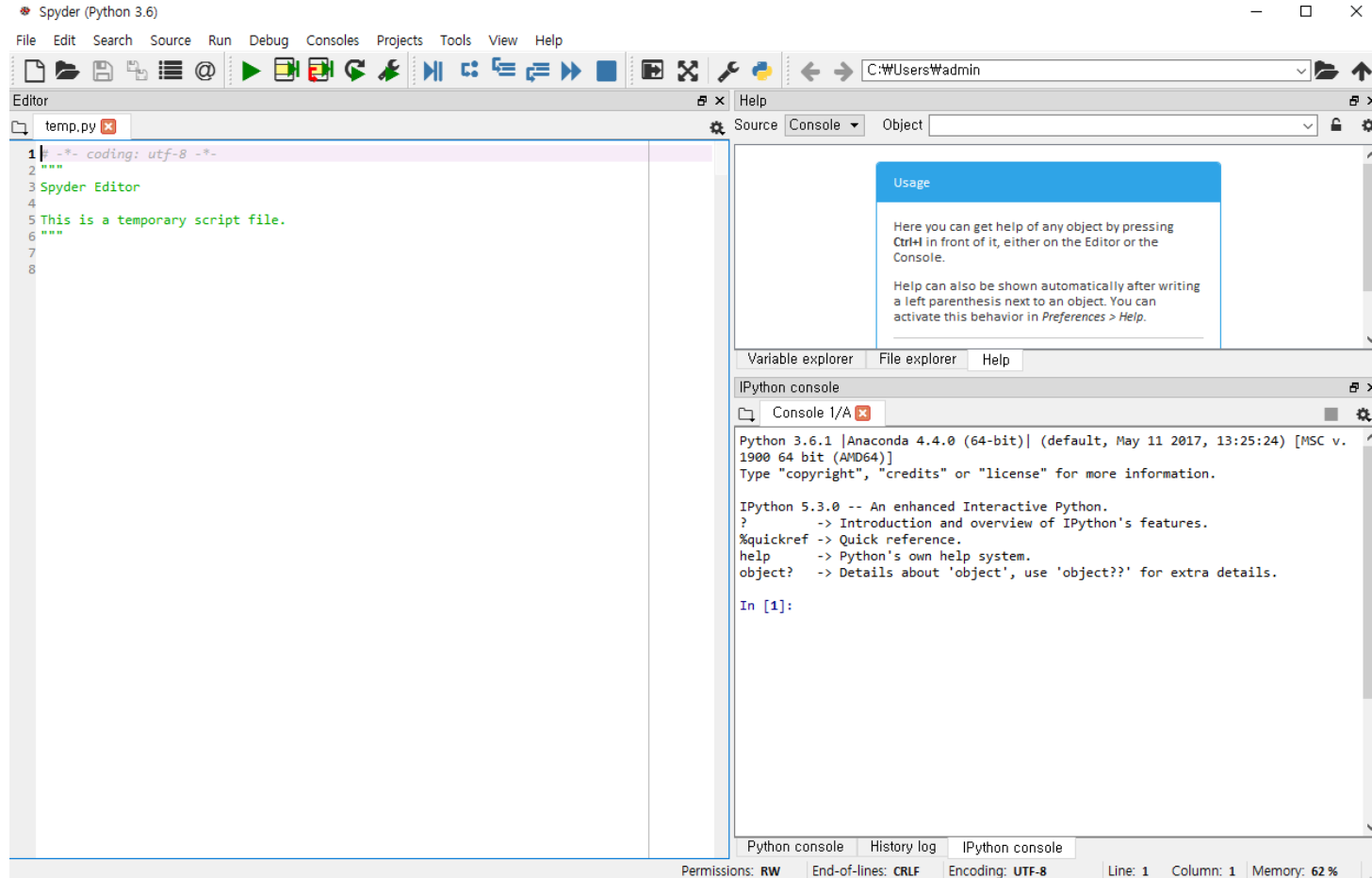
The image shows the Jupyter Notebook interface after inserting a new cell. The title is "jupyter Test (unsaved changes)". The menu bar and toolbar are the same as in the previous image. The code cell now contains two cells:

```
In [1]: print("Hello World")  
Hello World  
  
In [2]: print("Hello World in New Cell")  
Hello World in New Cell  
  
In [ ]: |
```

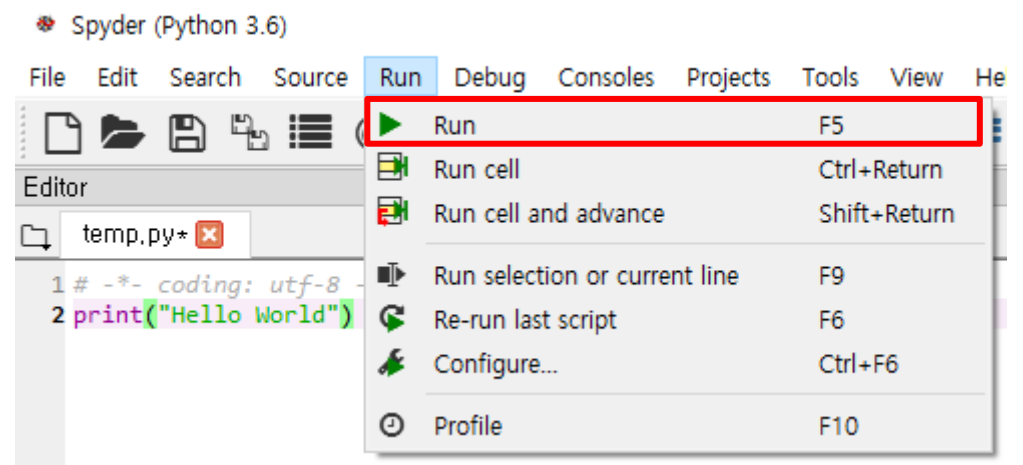
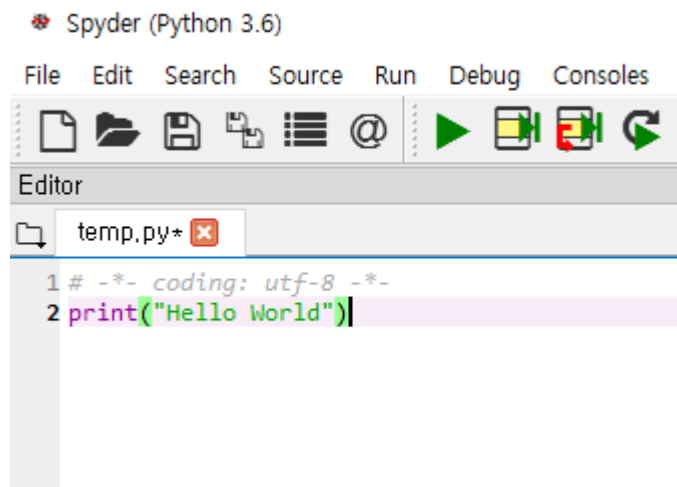
Save Notebook



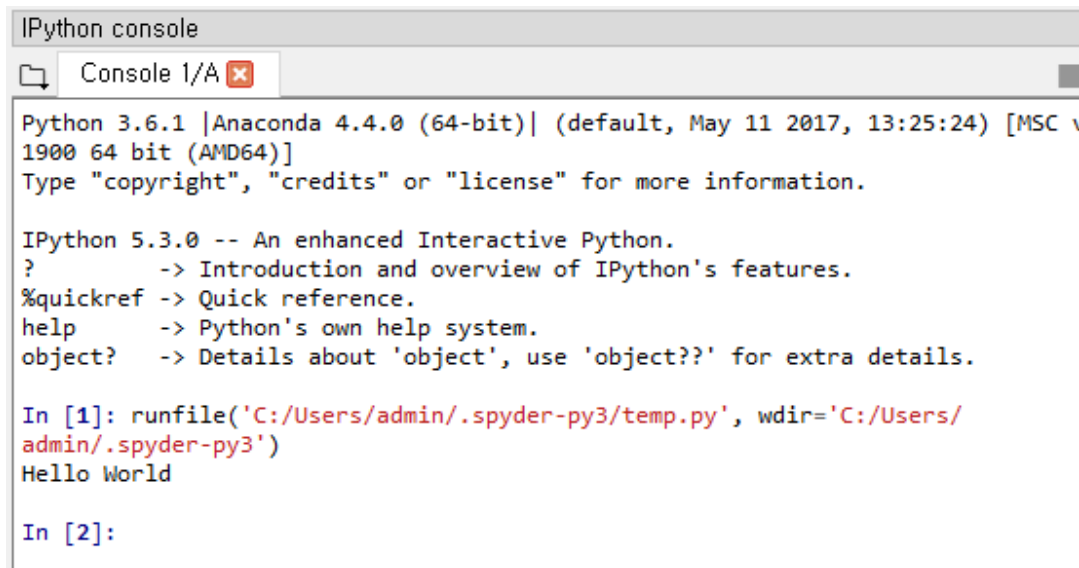
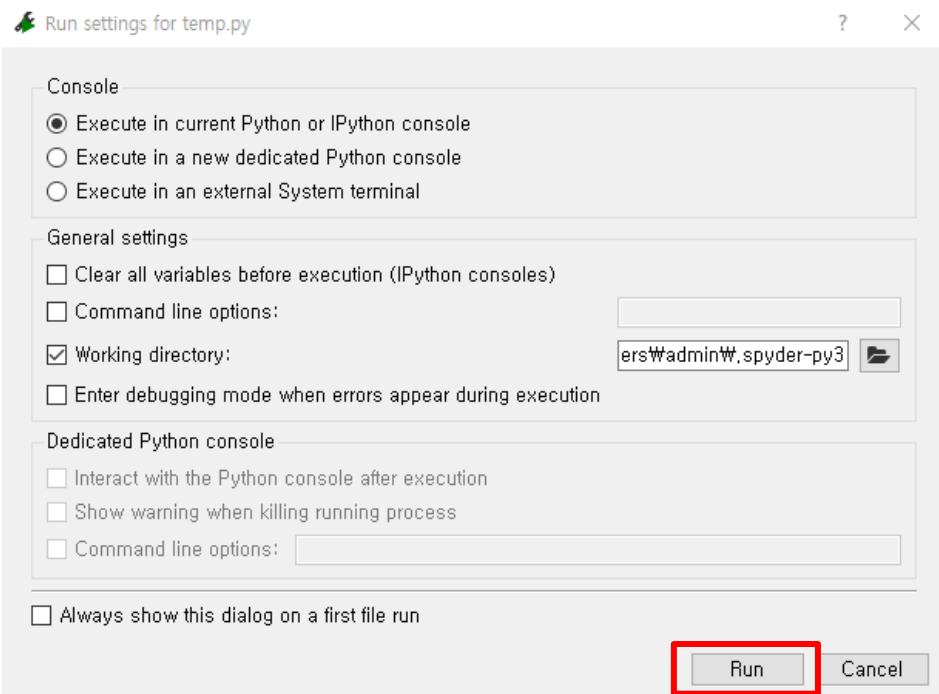
Spyder



Run Python Code in Spyder

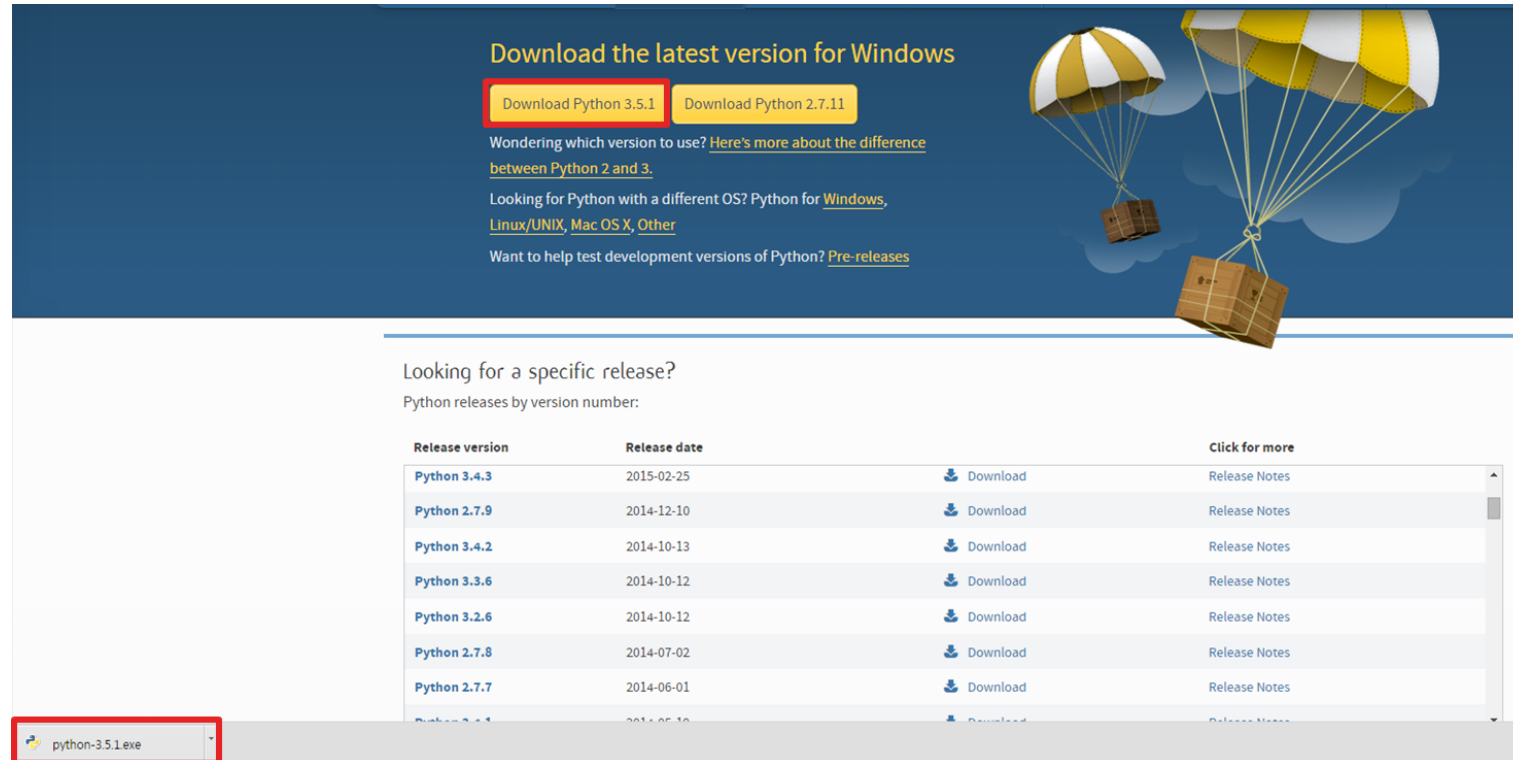


Run Python Code in Spyder



Appendix1: Install Python using Official Package

- Download Python
 - <https://www.python.org/downloads/>



Download the latest version for Windows

[Download Python 3.5.1](#) [Download Python 2.7.11](#)

Wondering which version to use? [Here's more about the difference between Python 2 and 3.](#)

Looking for Python with a different OS? Python for [Windows](#), [Linux/UNIX](#), [Mac OS X](#), [Other](#)

Want to help test development versions of Python? [Pre-releases](#)

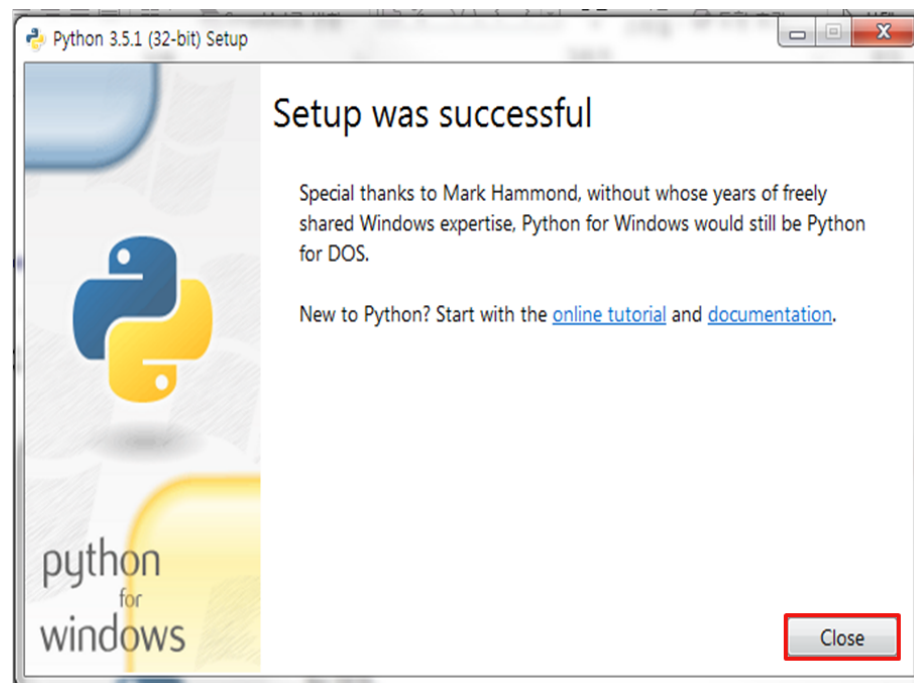
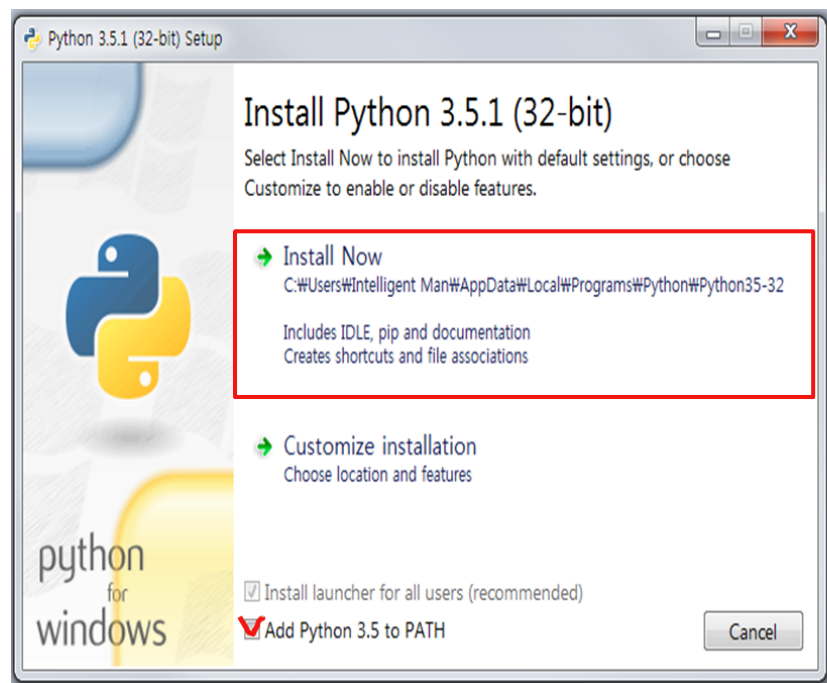
Looking for a specific release?

Python releases by version number:

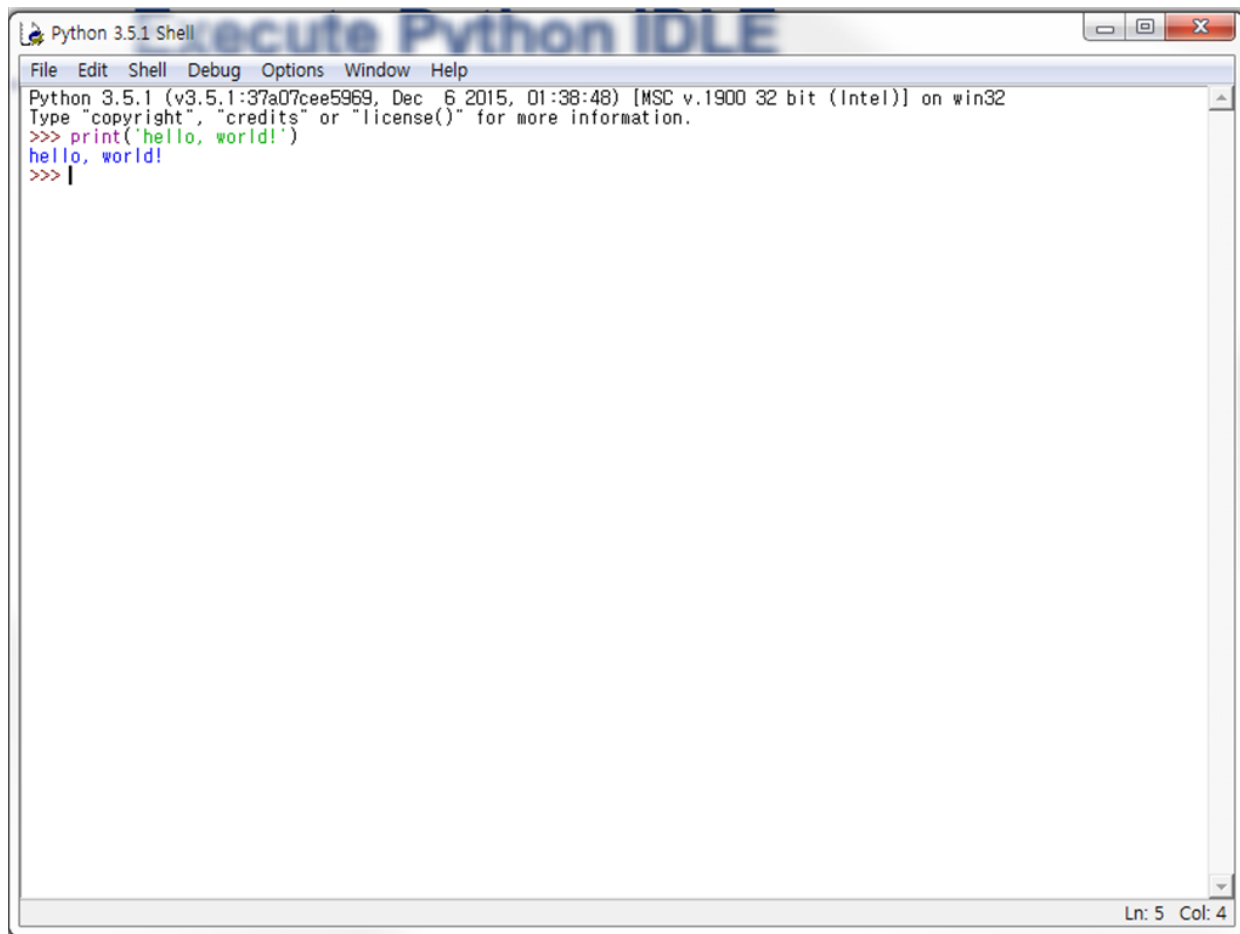
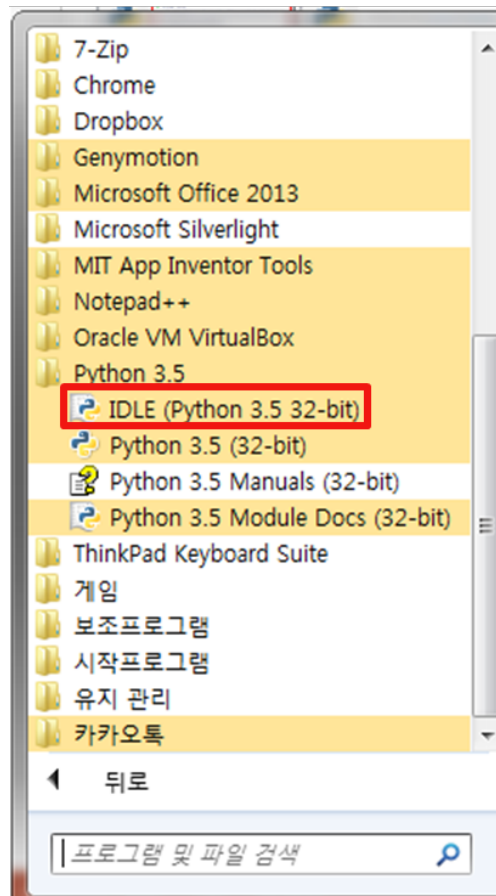
Release version	Release date		Click for more
Python 3.4.3	2015-02-25	Download	Release Notes
Python 2.7.9	2014-12-10	Download	Release Notes
Python 3.4.2	2014-10-13	Download	Release Notes
Python 3.3.6	2014-10-12	Download	Release Notes
Python 3.2.6	2014-10-12	Download	Release Notes
Python 2.7.8	2014-07-02	Download	Release Notes
Python 2.7.7	2014-06-01	Download	Release Notes

python-3.5.1.exe

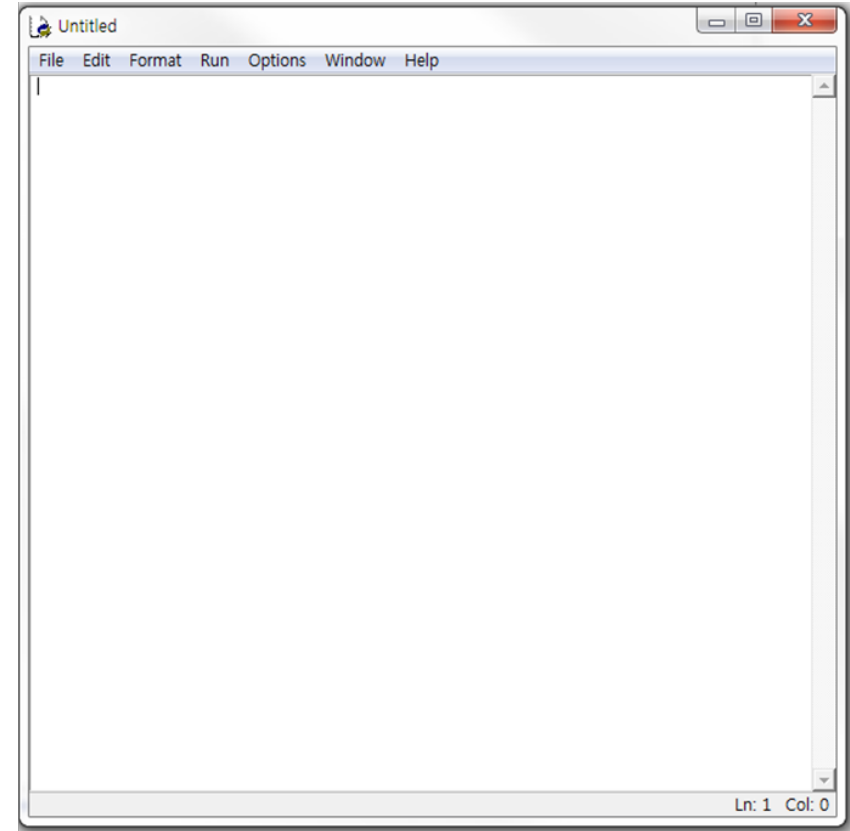
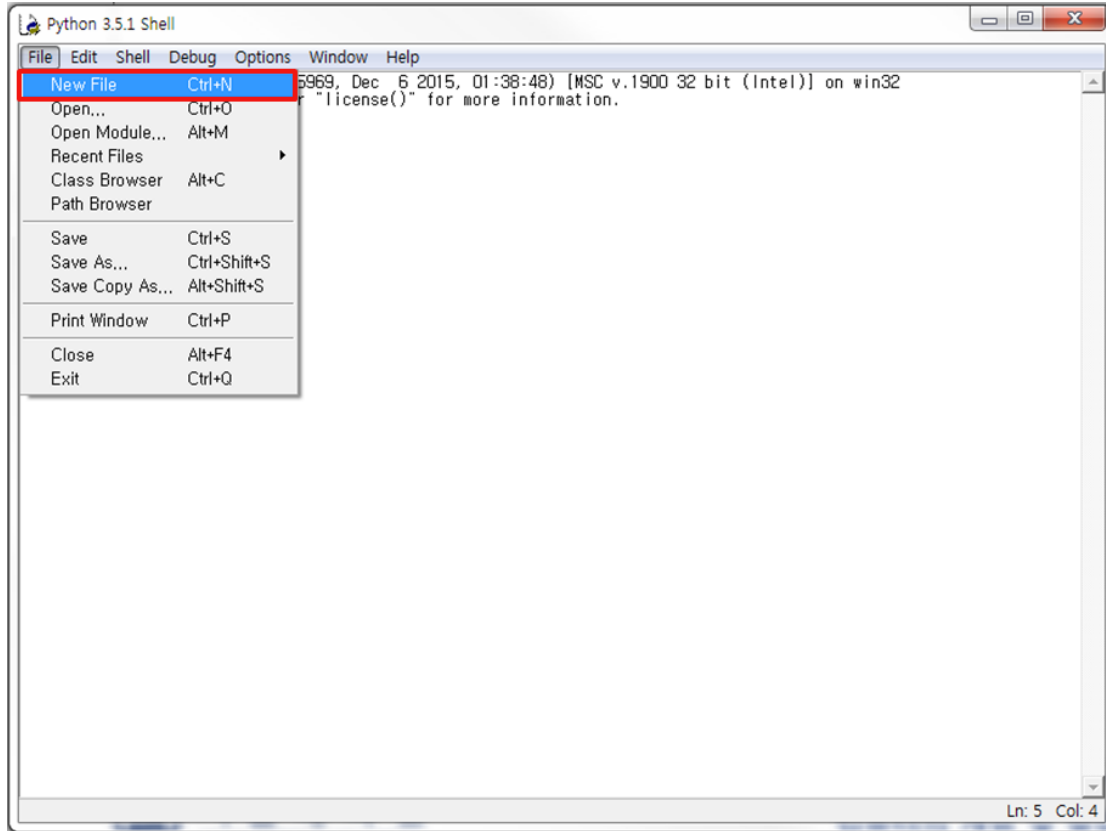
Appendix1: Install Python



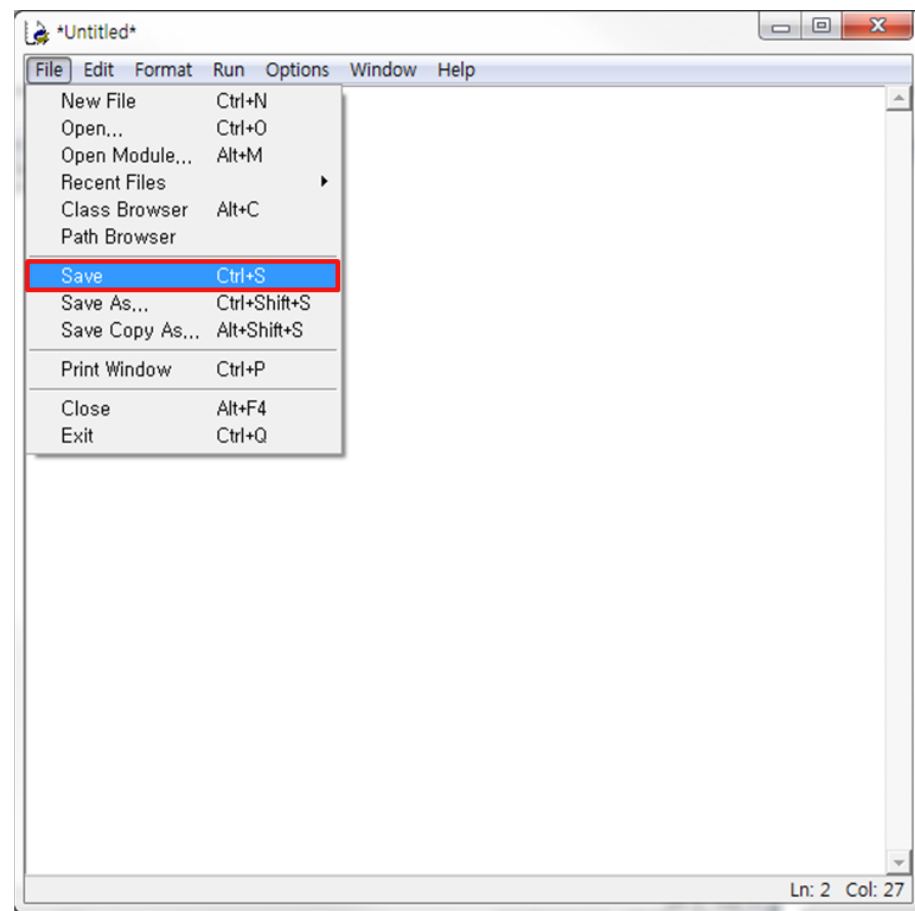
Appendix1: Execute Python IDLE



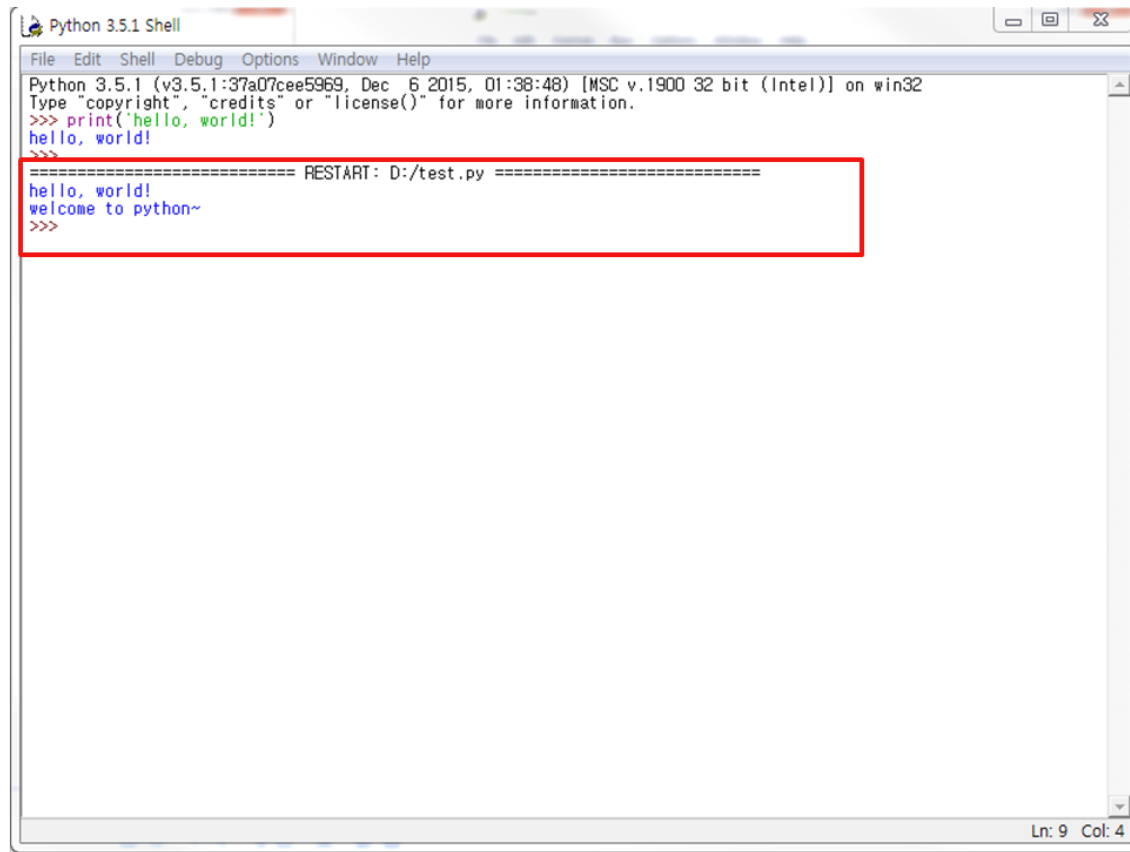
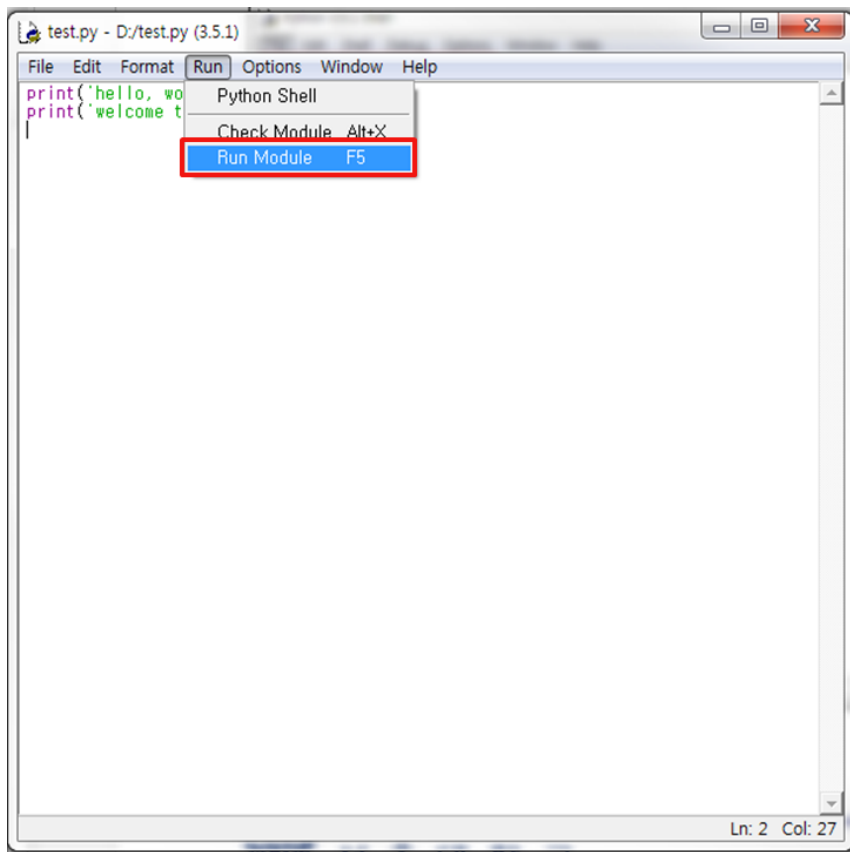
Appendix1: Save Python Scripts as File & Execute



Appendix1: Save Python Scripts as File & Execute



Appendix1: Save Python Scripts as File & Execute



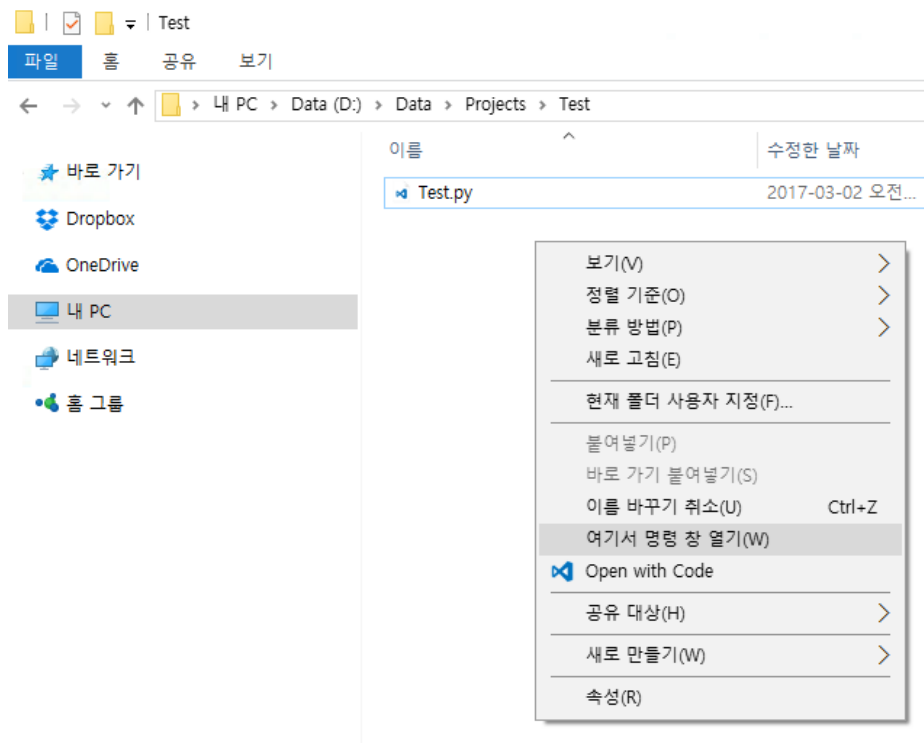
Appendix2: Programming with Text Editors

- Atom
 - <https://atom.io/>
- Sublime Text 3
 - <https://www.sublimetext.com/3>
- Visual Studio Code
 - <https://code.visualstudio.com/>



Appendix2: Open Command Prompt

- Shift + Mouse Right Click
- "여기서 명령 창 열기"

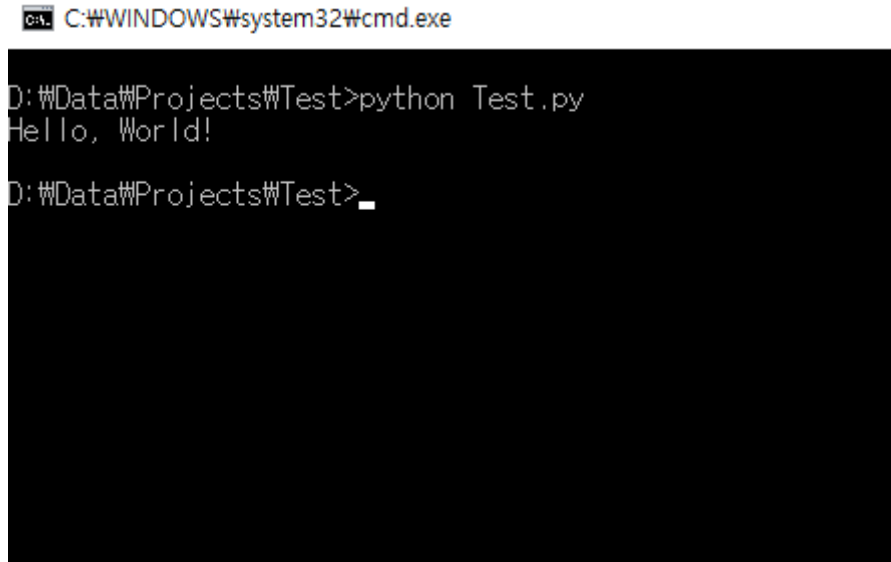


C:\WINDOWS\system32\cmd.exe

```
D:\Data\Projects\Test>
```


Appendix2: Run the Python Program

- >python Test.py



A screenshot of a Windows command prompt window. The title bar at the top reads "C:\WINDOWS\system32\cmd.exe". The command prompt shows the following text:
D:\Data\Projects\Test>python Test.py
Hello, World!
D:\Data\Projects\Test>_

Appendix3: PyCharm

- Integrated Development Environment for Python
- <https://www.jetbrains.com/pycharm/>

Download PyCharm

macOS

Windows

Linux

Professional

Full-featured IDE
for Python & Web
development

DOWNLOAD

232 MB

Community

Lightweight IDE
for Python & Scientific
development

DOWNLOAD

179 MB

Complete Installation

You can import your settings from a previous version of PyCharm.

☐ I want to import my settings from a custom location

Specify config folder or installation home of the previous version of PyCharm:

C:\Program Files (x86)\JetBrains\PyCharm Community Edition 2016.3.2

☒ I do not have a previous version of PyCharm or I do not want to import my settings

OK

PyCharm Community Edition Initial Configuration

Keymap scheme:

IntelliJ IDEA Classic

IDE theme:

IntelliJ

Editor colors and fonts:

Default

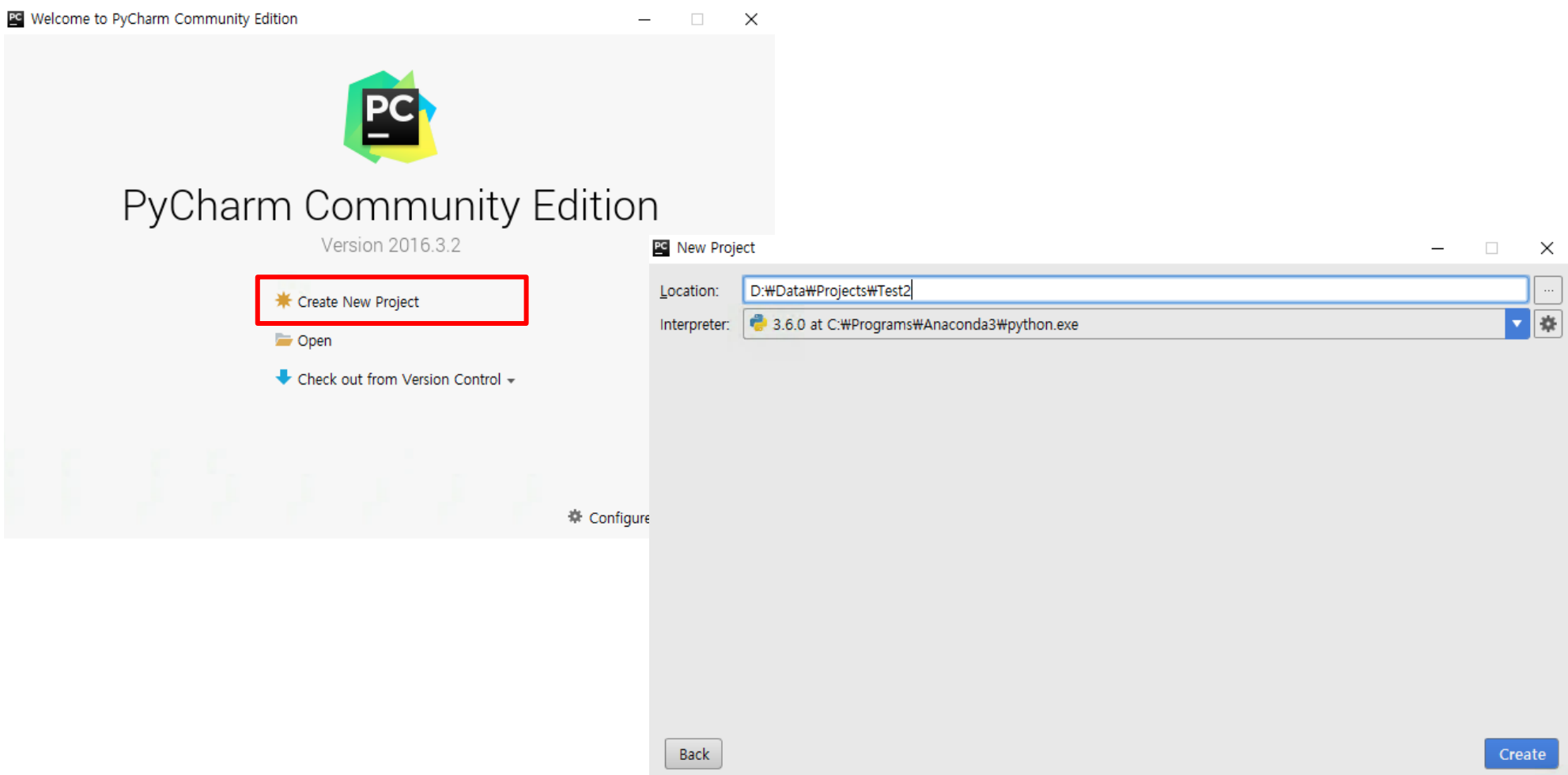
▶ Click to preview

You can use File | Settings to configure any of these settings later.

OK

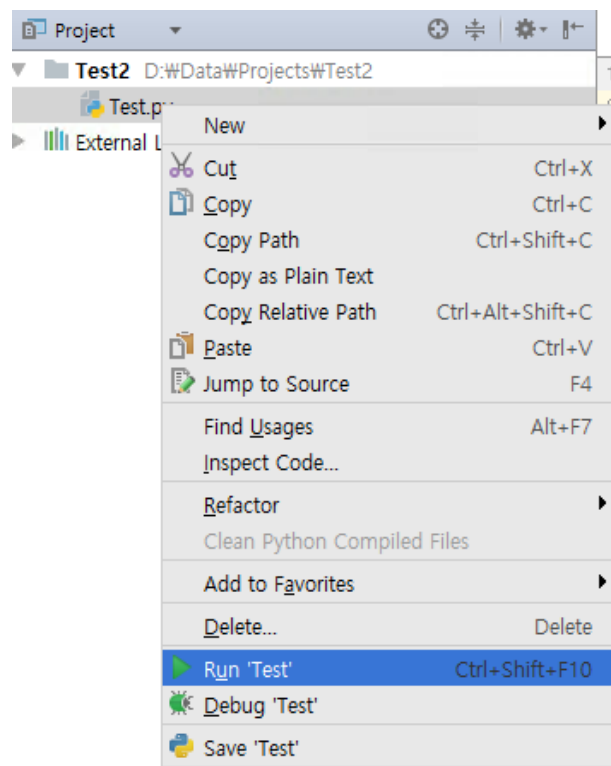
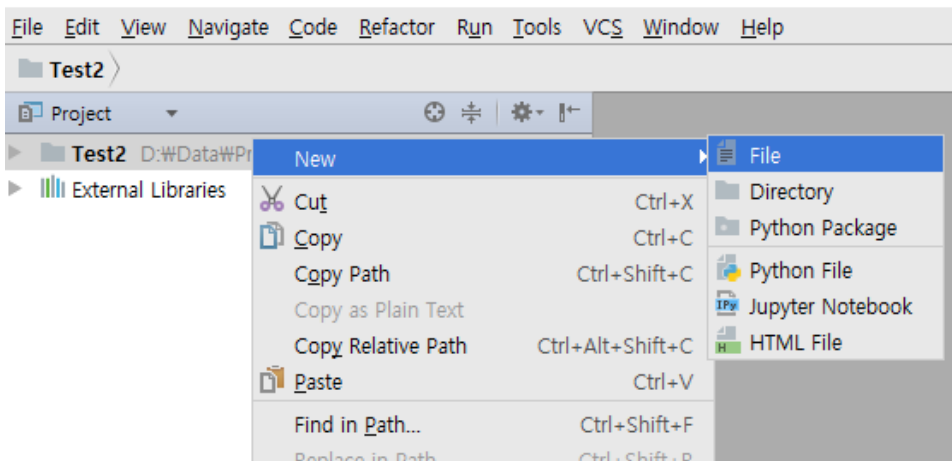
Skip

Appendix3: PyCharm

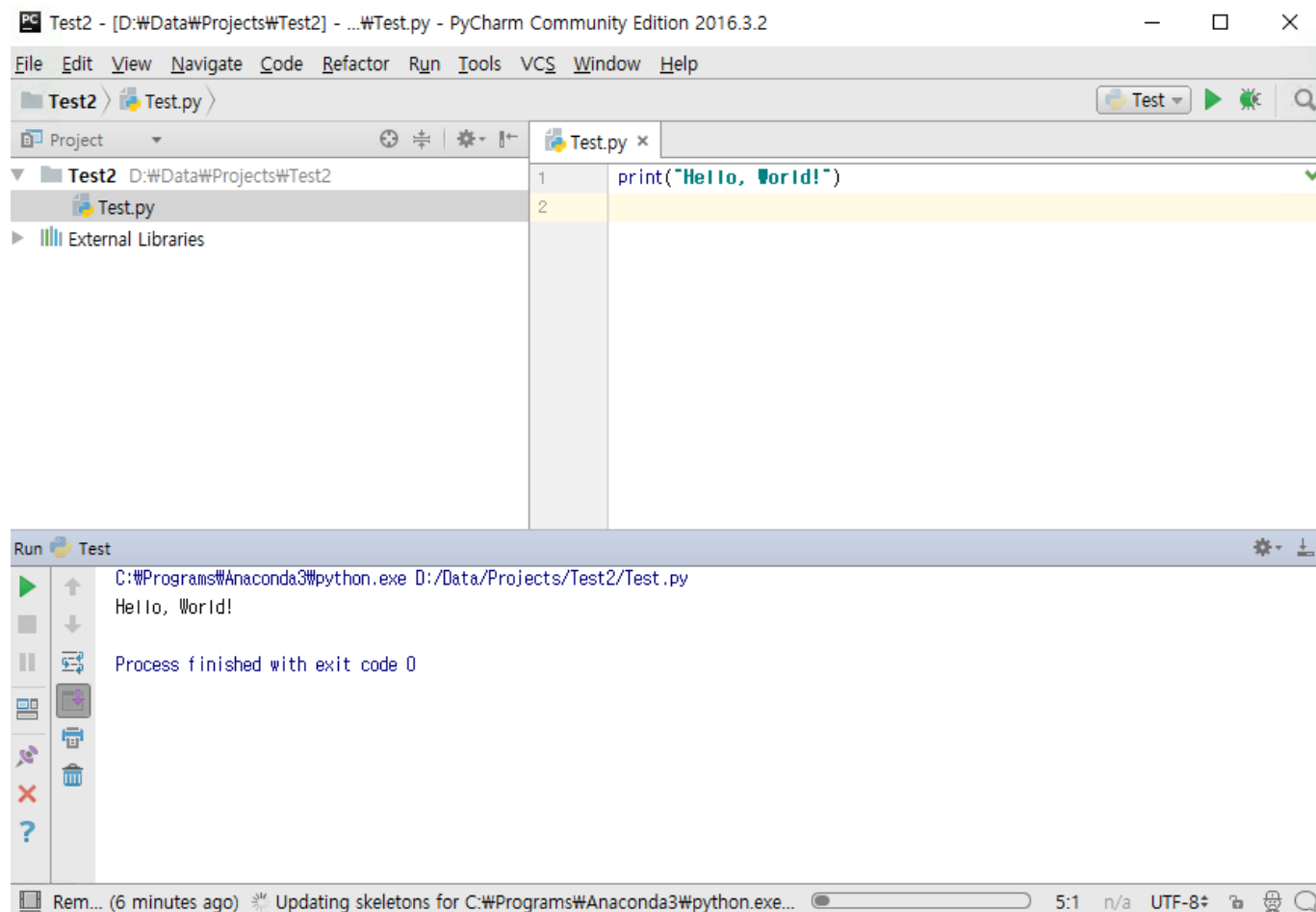


Appendix3: PyCharm

PC Test2 - [D:\#Data\#Projects\#Test2] - PyCharm Community Edition 2016.3.2



Appendix3: PyCharm



References

- For more information,
- <https://docs.python.org/3/using/windows.html> (for Windows)
- <https://docs.python.org/3/using> (other platforms)