

# Intro to Jupyterlab

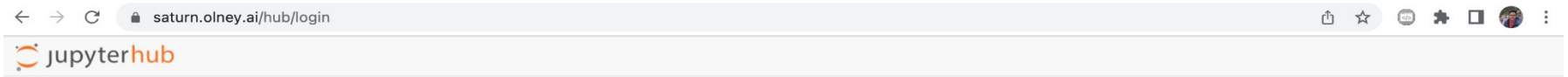
A guide to the jupyterlab user interface

# Objectives :

- Learn about the Jupyterlab environment
- Practice basic tasks in Jupyterlab

# Login to Jupyterlab

- Logging In to jupyterlab at **saturn.olney.ai**



Sign in

**Username:**

**Password:**

Sign in

← → ↻

saturn.olney.ai/user/hmshrque/lab/workspaces/cache

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File Edit View Run Kernel Tabs Settings Help

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Name	Last Modified
datawhys-content-dpl...	8 hours ago
datawhys-intern-note...	20 days ago
Identifying Common E...	a day ago
Untitled.ipynb	a day ago
Untitled1.ipynb	12 minutes ago


🔍 📄 📁 ⋮


🔖 Launcher


📄 Notebook


Python 3


Python [conda env:macaw-


Python [conda env:root] \*


R

R [conda env:root] \*


SoS [conda env:macaw-


xpython


xpython [conda env:macaw-


xpython [conda env:root] \*


> Console


Python 3


Python [conda env:macaw-


Python [conda env:root] \*


R

R [conda env:root] \*

SoS [conda env:macaw-

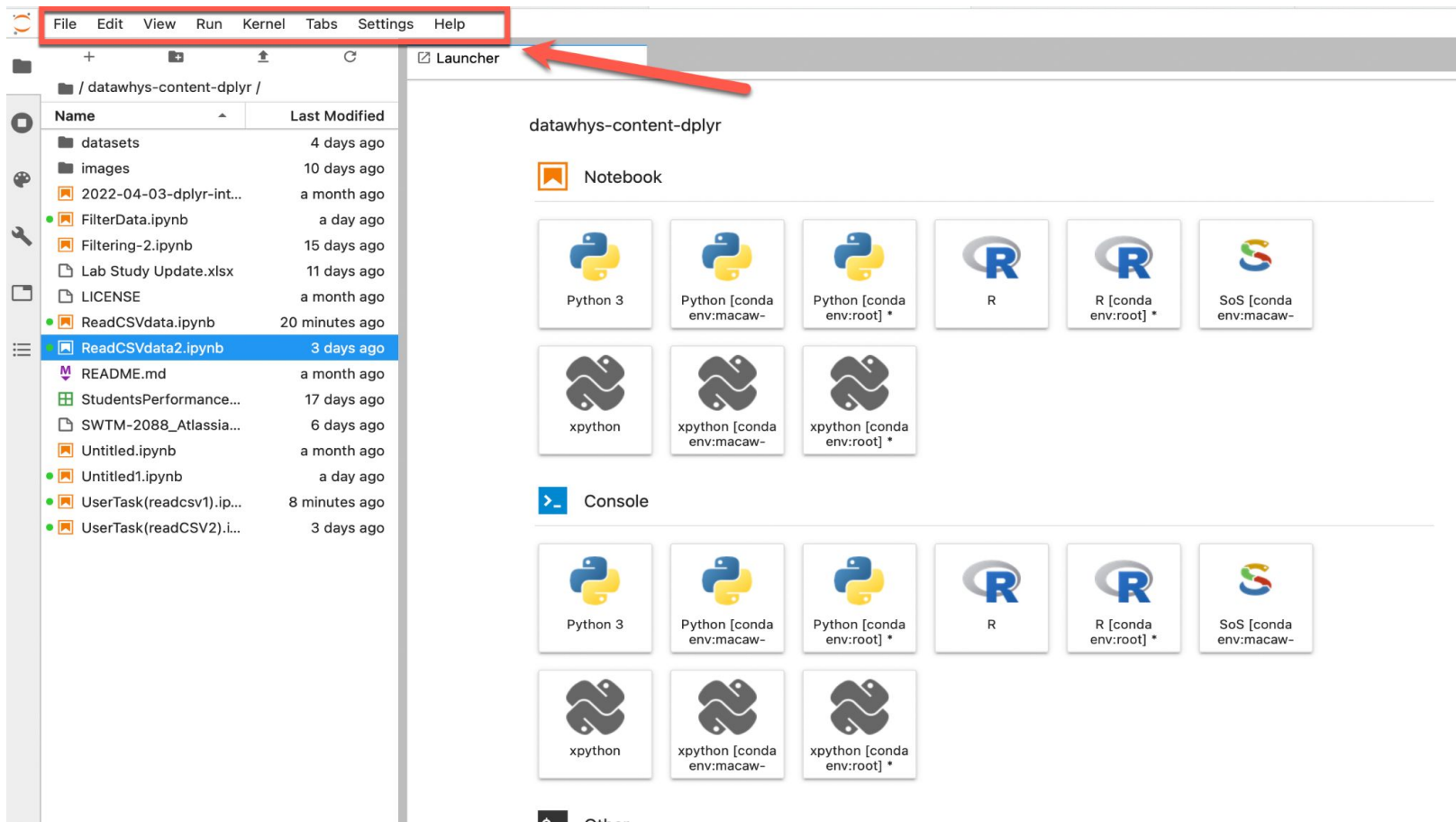
xpython

xpython [conda env:macaw-

xpython [conda env:root] \*

\$ \_ Other

# The Menu Bar



# The toolbar

The screenshot displays the Saturn IDE interface. At the top, a browser address bar shows the URL `saturn.olney.ai/user/hmshrque/lab/workspaces/cache`. Below it is a menu bar with options: File, Edit, View, Run, Kernel, Tabs, Settings, and Help. A red circle highlights the toolbar area, which includes icons for file operations (new, open, save, refresh) and a 'Launcher' tab. A red arrow points from the 'Launcher' tab to the toolbar. On the left, a file explorer sidebar shows a list of files and folders with columns for 'Name' and 'Last Modified'. The main workspace area is divided into two sections: 'Notebook' and 'Console'. Each section contains a grid of environment icons for Python, R, and SoS, with specific conda environments listed below each icon.

File Edit View Run Kernel Tabs Settings Help

Launcher

Name	Last Modified
datawhys-content-dpl...	8 hours ago
datawhys-intern-note...	20 days ago
Identifying Common E...	a day ago
Untitled.ipynb	a day ago
Untitled1.ipynb	12 minutes ago

Notebook

Python 3 Python [conda env:macaw- Python [conda env:root] \* R R [conda env:root] \* SoS [conda env:macaw-

xpython xpython [conda env:macaw- xpython [conda env:root] \*

Console

Python 3 Python [conda env:macaw- Python [conda env:root] \* R R [conda env:root] \* SoS [conda env:macaw-

xpython xpython [conda env:macaw- xpython [conda env:root] \*

Other

# The Left Panel(side bar)

The screenshot displays the Saturn IDE interface. The left sidebar is highlighted with a red box and a red arrow pointing to it. The sidebar contains a file explorer with a table of files and folders. The main workspace is divided into two panels: 'Notebook' and 'Console', each showing a grid of environment icons.

**File Explorer Table:**

Name	Last Modified
/	
datawhys-content-dpl...	8 hours ago
datawhys-intern-note...	20 days ago
Identifying Common E...	a day ago
Untitled.ipynb	a day ago
Untitled1.ipynb	12 minutes ago

**Notebook Panel:**

- Python 3
- Python [conda env:macaw-]
- Python [conda env:root] \*
- R
- R [conda env:root] \*
- SoS [conda env:macaw-]
- xpython
- xpython [conda env:macaw-]
- xpython [conda env:root] \*

**Console Panel:**

- Python 3
- Python [conda env:macaw-]
- Python [conda env:root] \*
- R
- R [conda env:root] \*
- SoS [conda env:macaw-]
- xpython
- xpython [conda env:macaw-]
- xpython [conda env:root] \*

**Other Panel:**

- \$\_ Other

# Folder Structure in Jupyterlab

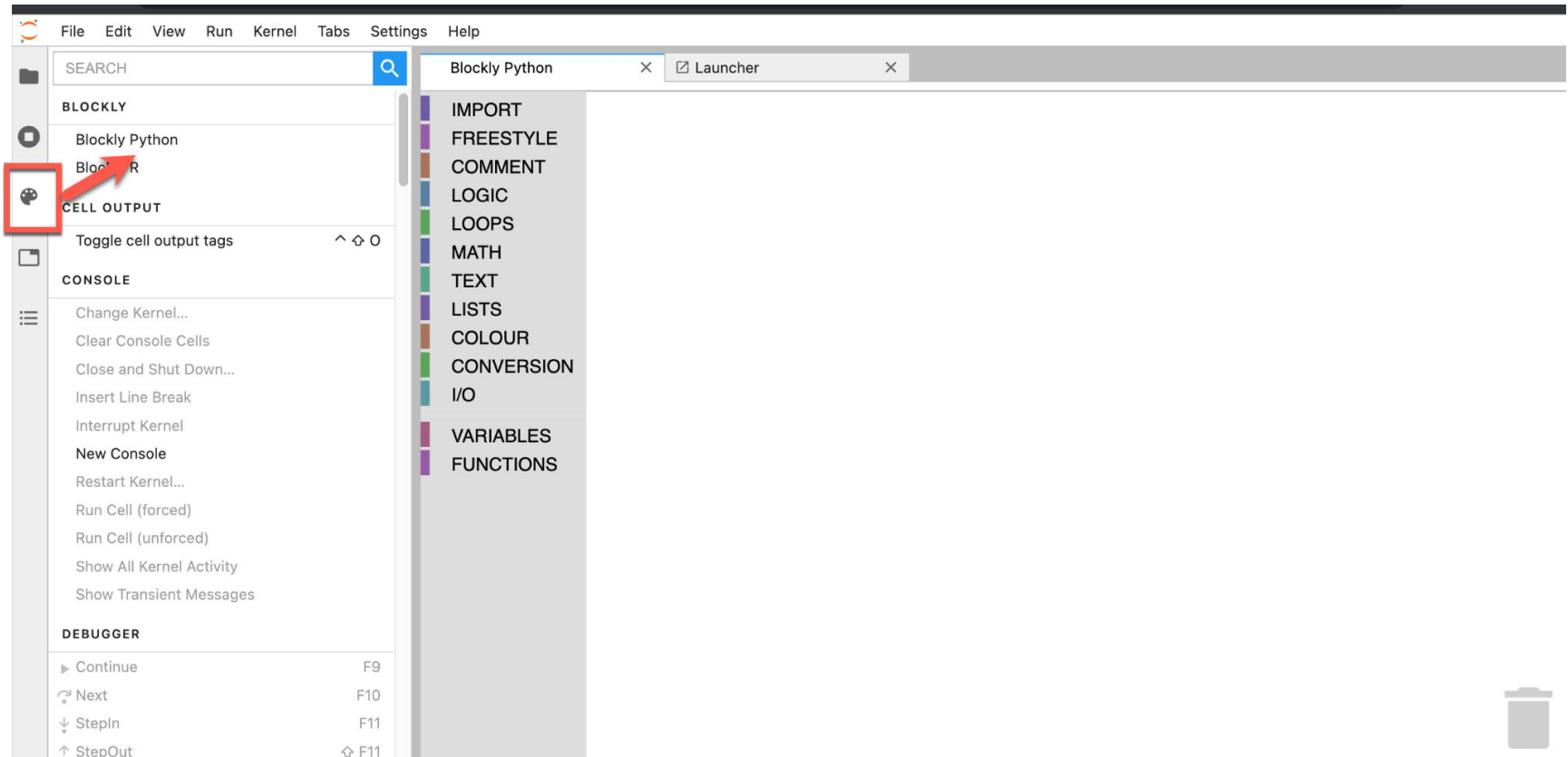
The screenshot displays the Jupyterlab web interface. The browser address bar shows the URL `saturn.olney.ai/user/hmshrque/lab/workspaces/cache`. The top menu bar includes `File`, `Edit`, `View`, `Run`, `Kernel`, `Tabs`, `Settings`, and `Help`. On the left, a sidebar contains icons for file management and a file browser panel. The file browser panel is highlighted with a red rectangle and shows a table of files and folders:

Name	Last Modified
/	
datawhys-content-dpl...	8 hours ago
datawhys-intern-note...	20 days ago
Identifying Common E...	a day ago
Untitled.ipynb	a day ago
Untitled1.ipynb	12 minutes ago

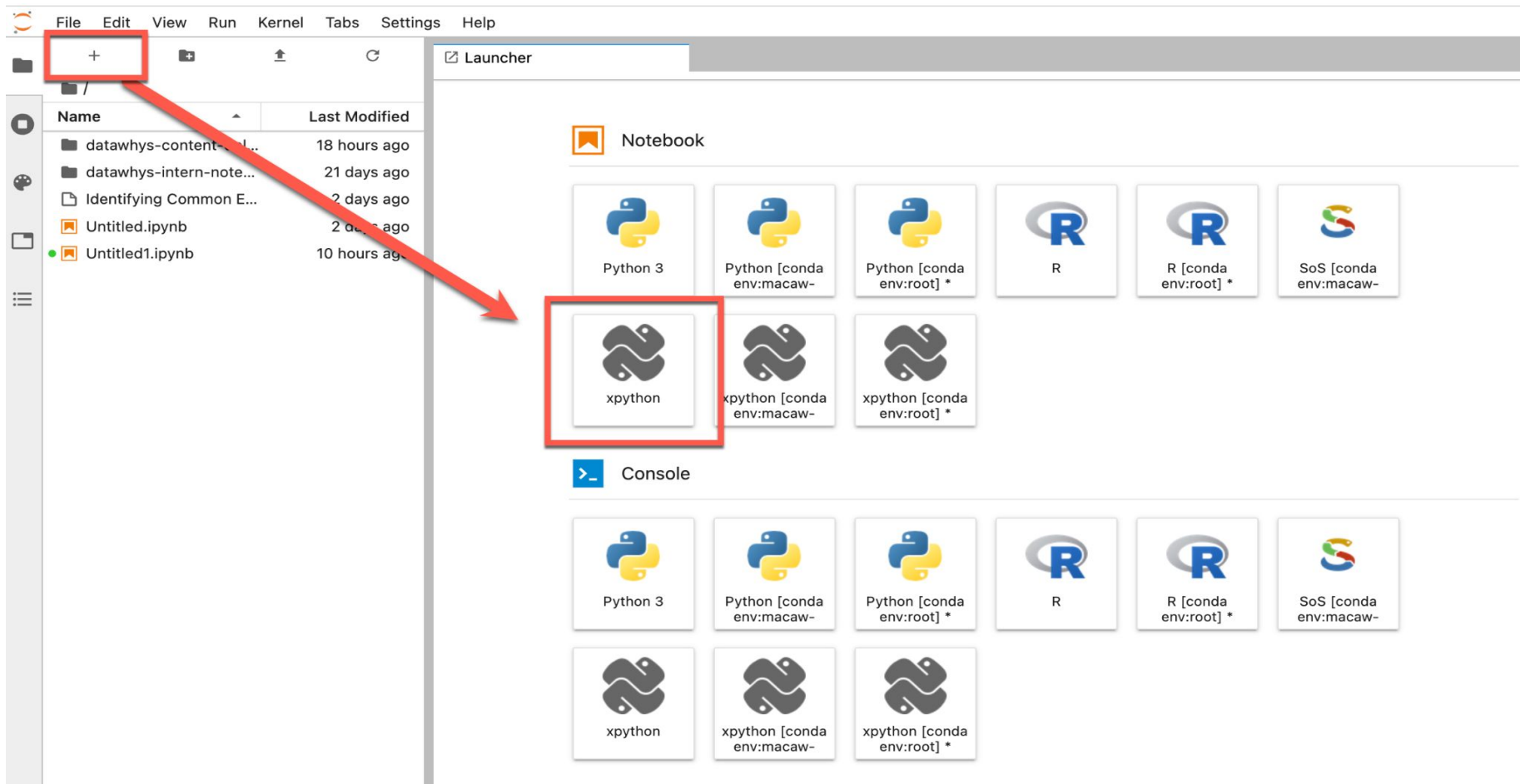
The main area of the interface is divided into two tabs: `Launcher` and `Console`. The `Launcher` tab is active and displays a grid of application launchers. These launchers are organized into three sections: `Notebook`, `Console`, and `Other`. Each section contains icons for different environments and languages, including Python 3, Python [conda env:macaw-], Python [conda env:root] \*, R, R [conda env:root] \*, SoS [conda env:macaw-], xpython, xpython [conda env:macaw-], and xpython [conda env:root] \*.



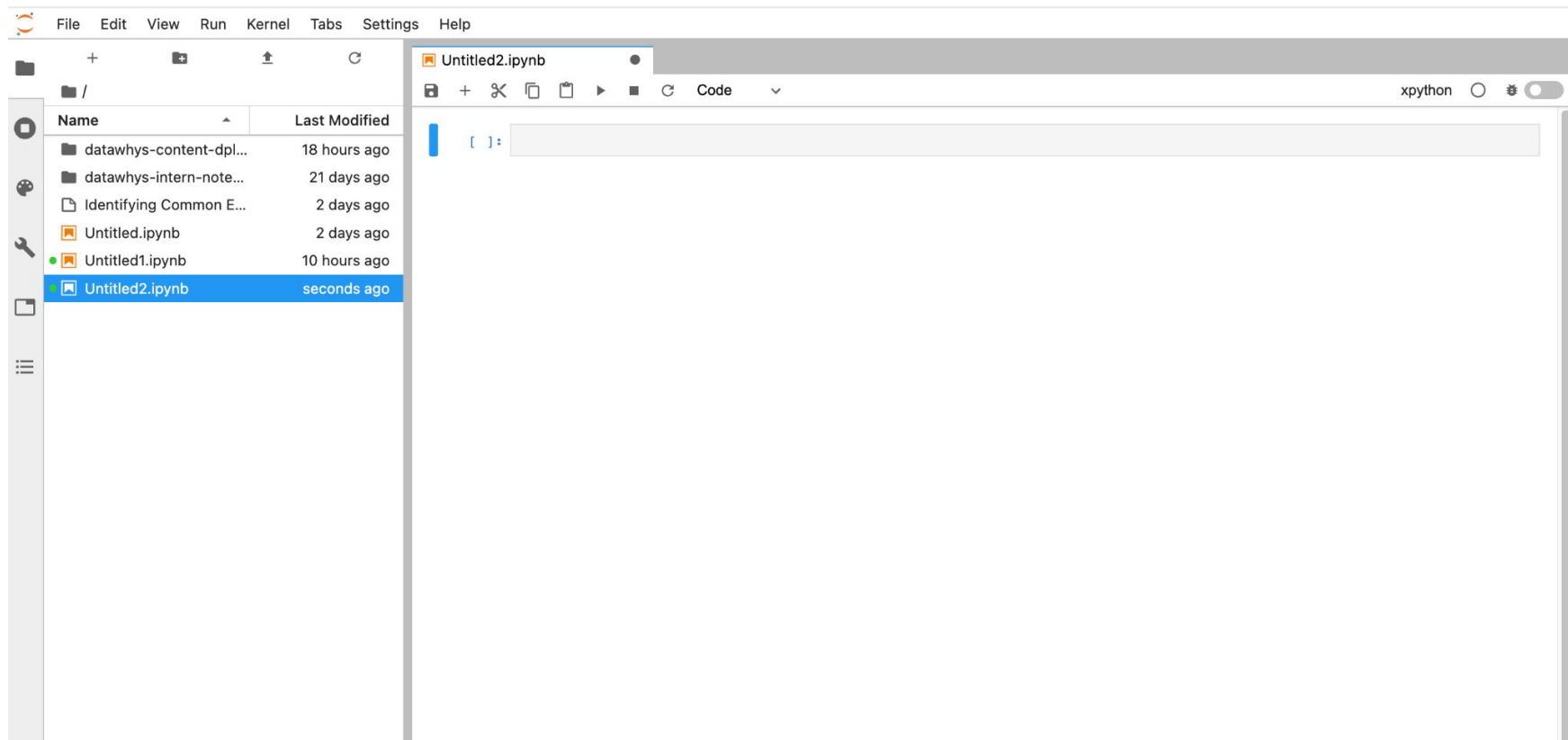
# The Blockly Palette



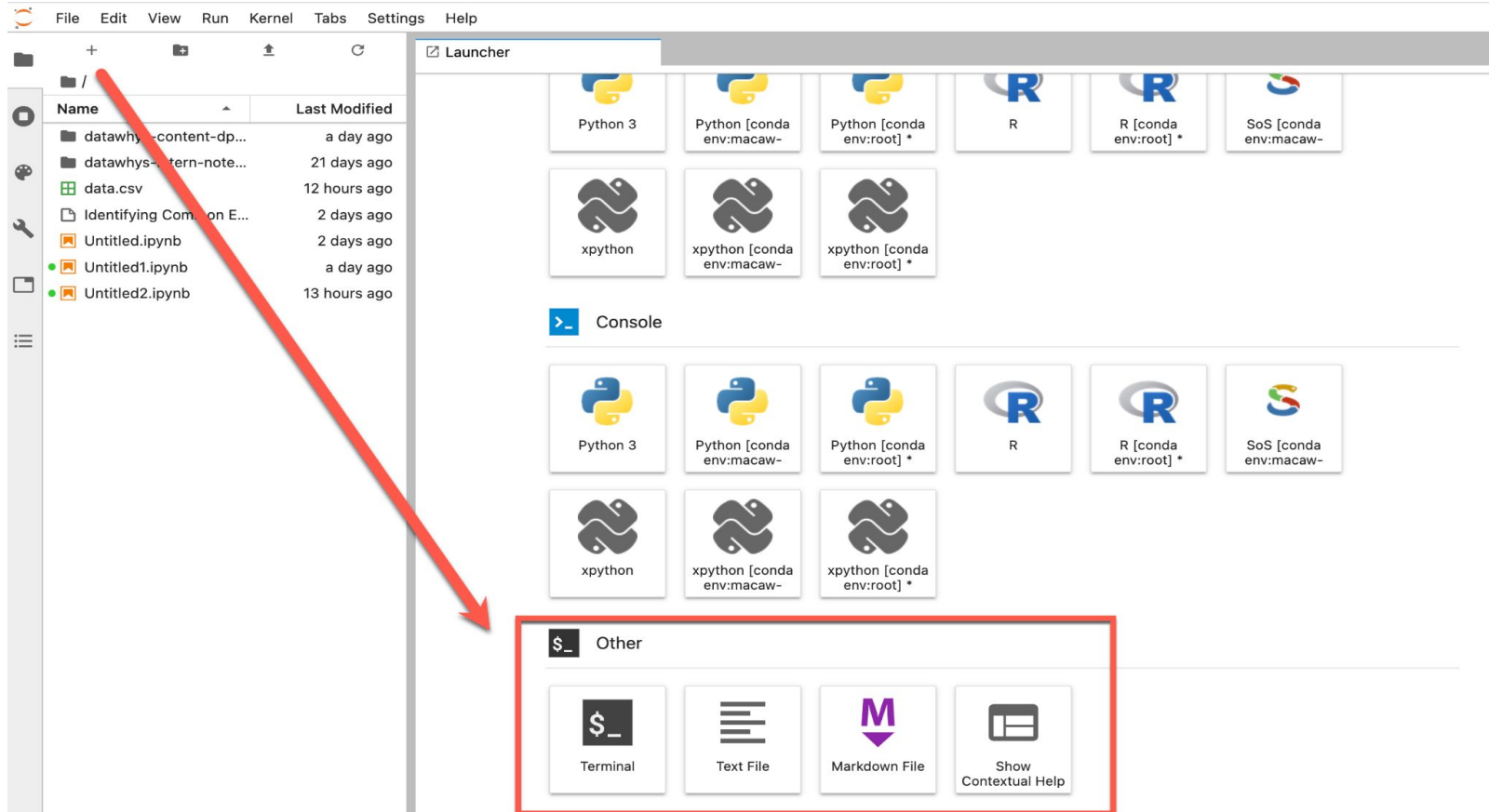
# Opening python file from launcher (1)



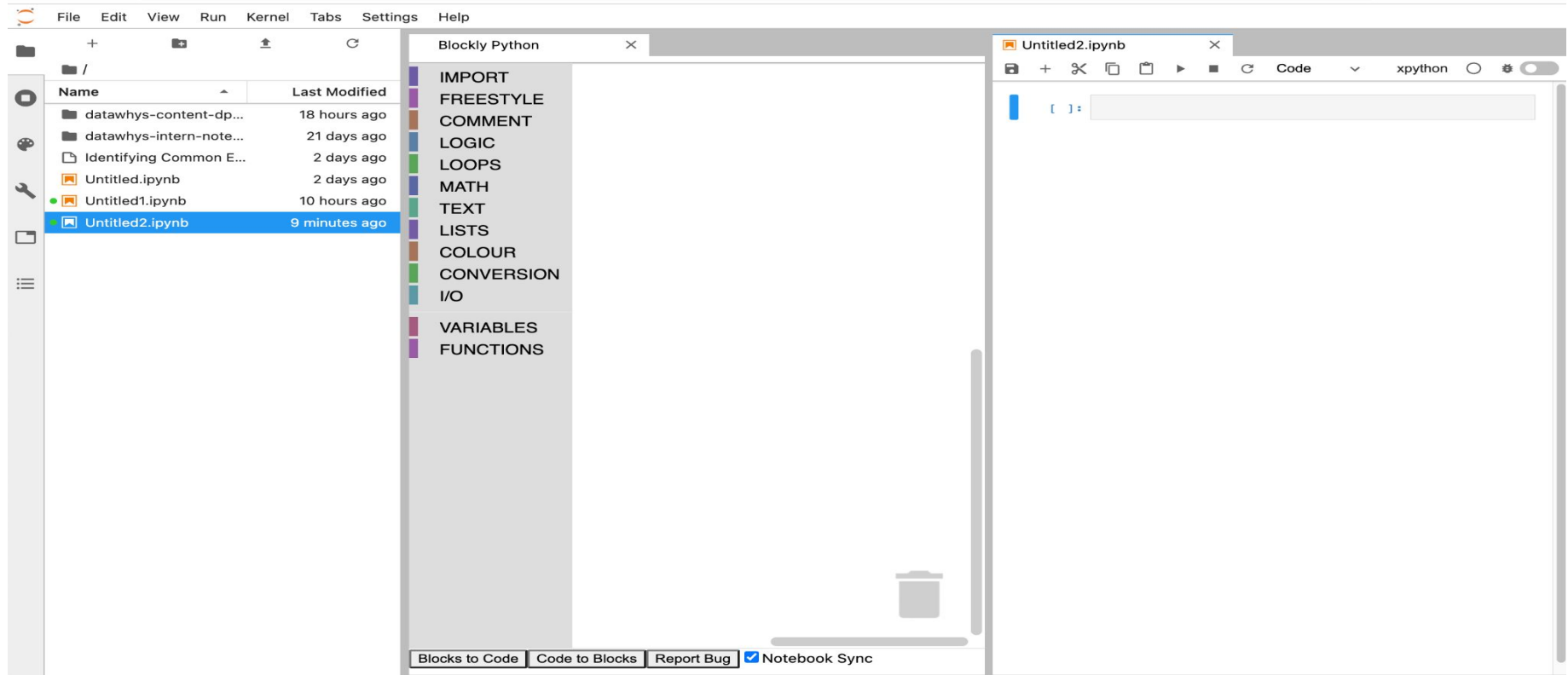
# Opening python file from launcher(2)



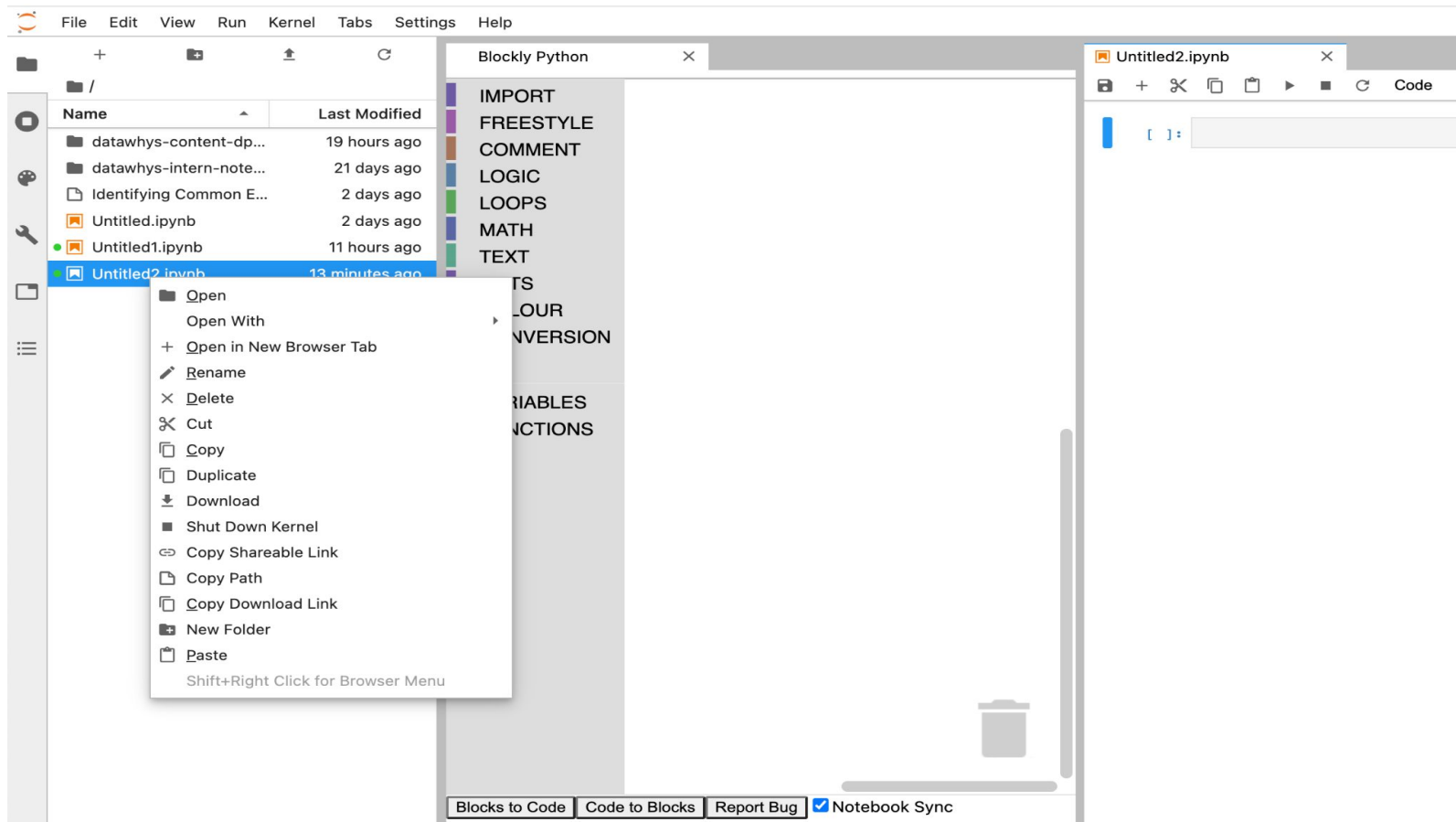
# Opening other file types



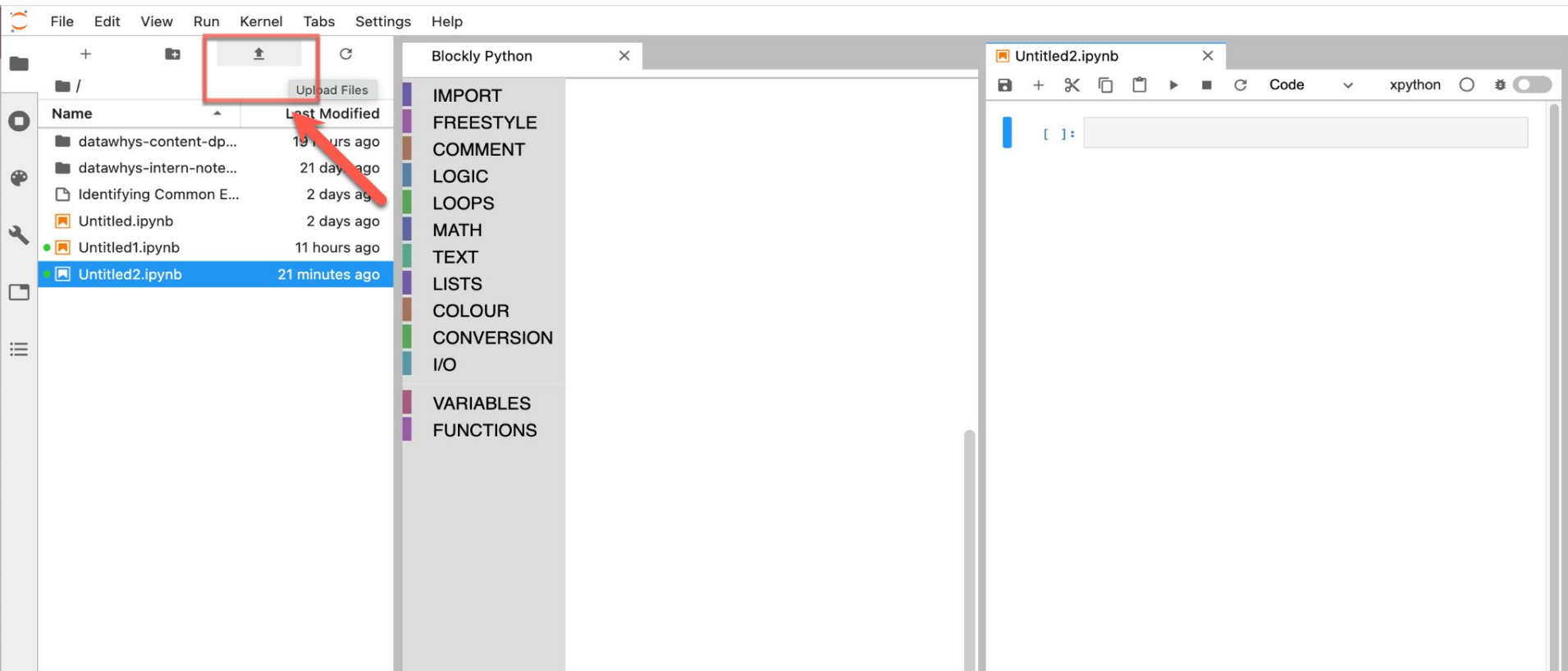
# Viewing blockly and python file side by side



# File Operations



# Uploading a file in Jupyterlab (1)



# Uploading a file in Jupyterlab (2)

The screenshot displays the JupyterLab interface. On the left, the file browser shows a list of files and folders. The file `data.csv` is highlighted with a red rectangle. In the center, the code editor is open, showing a list of code blocks on the left side, including `IMPORT`, `FREESTYLE`, `COMMENT`, `LOGIC`, `LOOPS`, `MATH`, `TEXT`, `LISTS`, `COLOUR`, `CONVERSION`, `I/O`, `VARIABLES`, and `FUNCTIONS`. On the right, a file upload dialog is open, showing the file `data.csv` being uploaded. The dialog includes a progress bar and a 'Code' button.

File Browser:

Name	Last Modified
dataawhys-content-dp...	19 hours ago
dataawhys-intern-note...	21 days ago
<b>data.csv</b>	seconds ago
Identifying Common E...	2 days ago
Untitled.ipynb	2 days ago
Untitled1.ipynb	11 hours ago
Untitled2.ipynb	25 minutes ago

Code Editor:

- IMPORT
- FREESTYLE
- COMMENT
- LOGIC
- LOOPS
- MATH
- TEXT
- LISTS
- COLOUR
- CONVERSION
- I/O
- VARIABLES
- FUNCTIONS

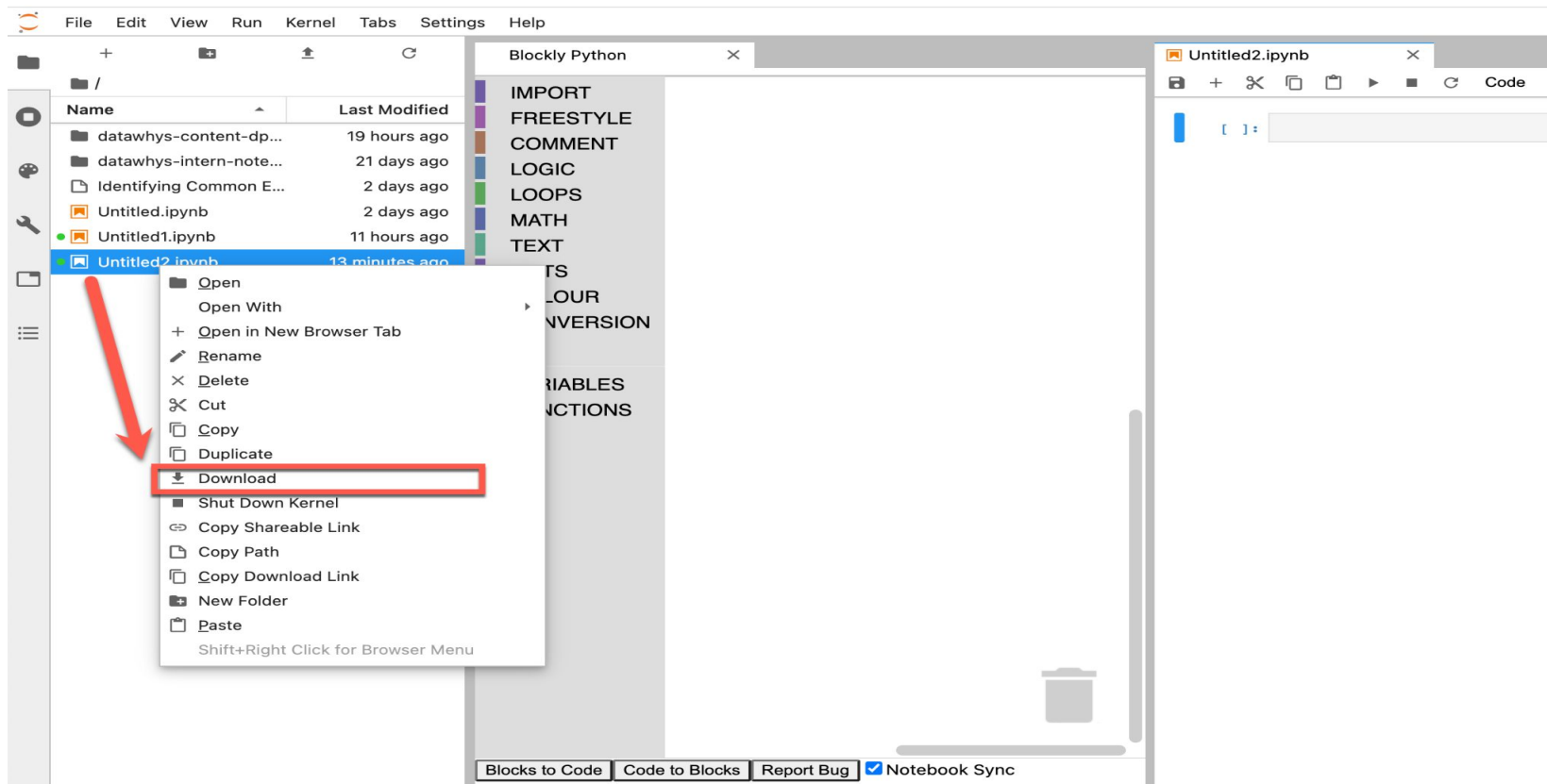
File Upload Dialog:

Untitled2.ipynb

[ ]:



# Downloading a file from Jupyterlab



# Practice Tasks:

- Login into the Jupyterlab system (wd username and password.)
- Go to “Intro to Jupyterlab” folder
- There should be test.ipynb file
- Rename that file “testrenamed.ipynb”
- Open a xpython file from launcher and name it “createfile.ipynb”
- Open a block palette from the side panel
- View the blocks and “createfile.ipynb” file side by side
- Download the “createfile.ipynb” file
- Rename the downloaded file “upload.ipynb”
- Upload the ‘upload.ipynb’ file to jupyterlab
- Delete file “testrenamed.ipynb”
- Check which files are open from the ‘Kernel’ tab

# Self Practice:

- Login into the Jupyterlab system (wd username and password.)
- Go to “Intro to Jupyterlab” folder
- There should be newtest.ipynb file
- Rename that file “newtestrenamed.ipynb”
- Open a xpython file from launcher and name it “createfile.ipynb”
- Open a block palette from the side panel
- View the blocks and “createfile.ipynb” file side by side
- Download the “createfile.ipynb” file
- Rename the downloaded file “upload.ipynb”
- Upload the ‘upload.ipynb’ file to jupyterlab
- Delete the “newtestrenamed.ipynb” file
- Check which files are open from the ‘Kernel’ tab