

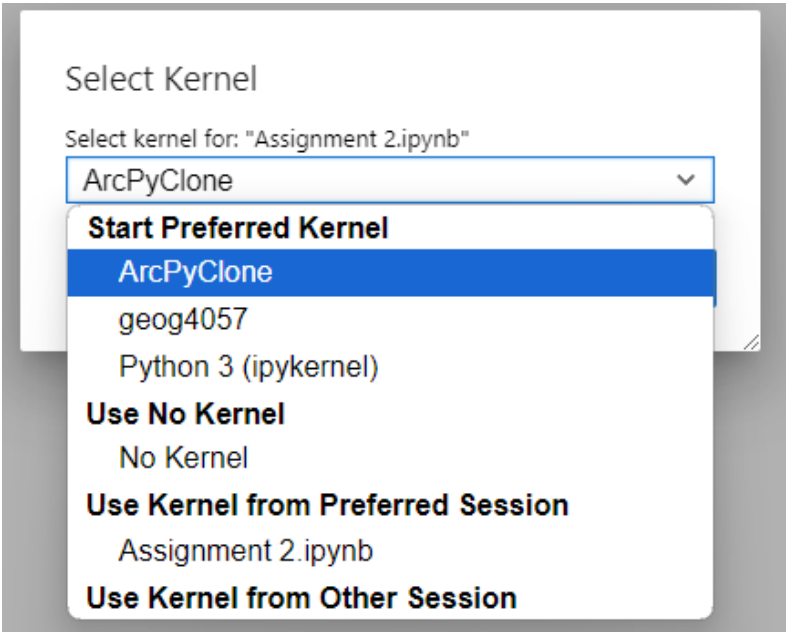
ArcPyClone environment has been created.

```
Command Prompt
Microsoft Windows [Version 10.0.22621.4169]
(c) Microsoft Corporation. All rights reserved.

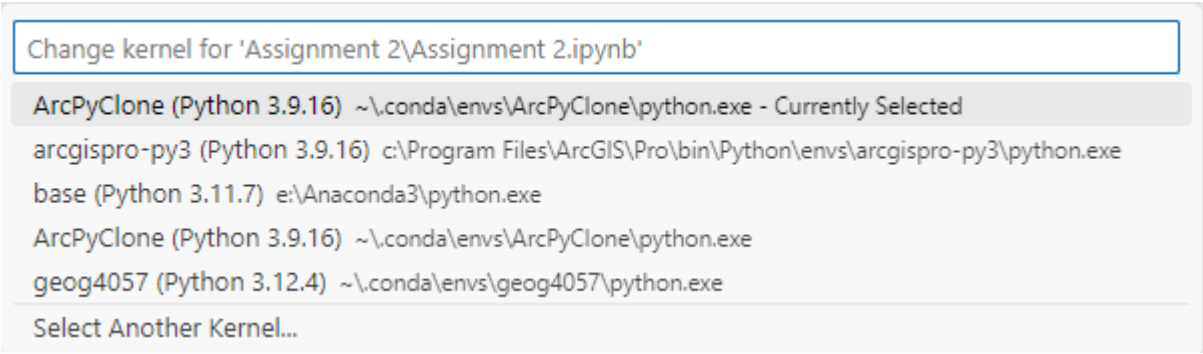
C:\Users\hli69>conda env list
# conda environments:
#
arcgispro-py3      C:\Program Files\ArcGIS\Pro\bin\Python\envs\arcgispro-py3
ArcPyClone        C:\Users\hli69\.conda\envs\ArcPyClone
gee               C:\Users\hli69\.conda\envs\gee
geog4057          C:\Users\hli69\.conda\envs\geog4057
base              E:\Anaconda3
                  E:\KNIME\KNIME\bundling\envs\sdl_harvard_geospatial

C:\Users\hli69>
```

Kernels can be selected in Jupyter Notebook.



Kernels can be selected in VS Code.



Command “import arcpy” cannot be executed with the kernel **ArcPyClone** in VS Code.

The screenshot shows the Visual Studio Code interface with a Jupyter Notebook open. The Explorer sidebar on the left shows the file structure. The main editor displays the notebook content, which includes a code cell with the command `import arcpy` and a subsequent cell with `print(arcpy.GetInstallInfo()['Version'])`. A red error message is displayed below the first cell, indicating a kernel crash. The Jupyter log at the bottom provides detailed information about the kernel execution, including the path to the ArcPyClone kernel and the error message.

File Edit Selection View Go Run Terminal Help

geog4057_Hanqi

Assignment 2.ipynb M X

Assignment 2 > Assignment 2.ipynb > print(arcpy.GetInstallInfo()['Version'])

+ Code + Markdown | Run All Restart Clear All Outputs Go To | Variables Outline ...

import arcpy

[1] X Python

The Kernel crashed while executing code in the current cell or a previous cell. Please review the code in the cell(s) to identify a possible cause of the failure. Click [here](#) for more info. View Jupyter [log](#) for further details.

+ Code + Markdown

print(arcpy.GetInstallInfo()['Version'])

[] Python

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS JUPYTER

Jupyter

Visual Studio Code (1.93.1, undefined, desktop)

Jupyter Extension Version: 2024.8.1.

Python Extension Version: 2024.14.1.

PyLance Extension Version: 2024.9.1.

Platform: win32 (x64).

Temp Storage folder ~\AppData\Roaming\Code\User\globalStorage\ms-toolsai.jupyter\version-2024.8.1

Workspace folder f:\OneDrive - Louisiana State University\Analysis Code\Python Defult Working Directory\GEOG-4057-GISProgramming\programming\geog4057_Hanqi, Home = c:\Users\hli69

23:55:41.275 [info] Starting Kernel (Python Path: ~\conda\envs\ArcPyClone\python.exe, Conda, 3.9.16) for 'f:\OneDrive - Louisiana State University\Analysis Code\Python Defult Working Directory\GEOG-4057-GISProgramming\programming\geog4057_Hanqi\Assignment 2\Assignment 2.ipynb' (disableUI=true)

23:55:45.250 [info] Process Execution: ~\conda\envs\ArcPyClone\python.exe -c "import ipykernel; print(ipykernel.__version__); print("5dc3a68c-e34e-4080-9c3e-2a532b2ccb4d"); print(ipykernel.__file__)"

23:55:45.260 [info] Process Execution: ~\conda\envs\ArcPyClone\python.exe c:\Users\~\.vscode\extensions\ms-toolsai.jupyter-2024.8.1-win32-x64\pythonFiles\vscode_datascience_helpers\kernel_interrupt_daemon.py --ppid 31788

> cwd: ~\.vscode\extensions\ms-toolsai.jupyter-2024.8.1-win32-x64\pythonFiles\vscode_datascience_helpers

23:55:45.276 [info] Process Execution: ~\conda\envs\ArcPyClone\python.exe -m pip list

23:55:45.555 [info] Process Execution: ~\conda\envs\ArcPyClone\python.exe -m ipykernel_launcher --f=c:\Users\~\AppData\Roaming\jupyter\runtime\kernel-v350b3cad63ac8992bb025a45ce6d62e76eaf7b48.json

> cwd: f:\OneDrive - Louisiana State University\Analysis Code\Python Defult Working Directory\GEOG-4057-GISProgramming\programming\geog4057_Hanqi\Assignment 2

23:55:47.918 [info] Kernel successfully started

23:55:47.919 [warn] No nbextensions folder found for kernel .arcpyclone.c:\Users\~\.conda\envs\ArcPyClone\python.exe.c:\Users\~\.conda\envs\ArcPyClone\python.exe.-mipykernel_launcher

23:56:06.206 [error] Disposing session as kernel process died ExitCode: 3221225477, Reason:

Command “import arcpy” can be executed in the Terminal with the kernel *ArcPyClone* in VS Code.

The image shows a Visual Studio Code (VS Code) interface with a Jupyter Notebook open. The Explorer sidebar on the left shows the file structure: **EXPLORER**, **GEOG4057_HANQI**, **OUTLINE**, and **TIMELINE**. The Jupyter Notebook has two cells. The first cell contains the code `import arcpy` and has a red error icon. The second cell contains the code `print(arcpy.GetInstallInfo()['Version'])` and has a green success icon.

The error message in the first cell reads:

```
[1] The Kernel crashed while executing code in the current cell or a previous cell.
Please review the code in the cell(s) to identify a possible cause of the failure.
Click here for more info.
View Jupyter log for further details.
```

The terminal window at the bottom shows the command prompt for the ArcPyClone kernel. The command `python buffer.py` was executed. The output shows the ArcPyClone environment setup, including the path to the ArcPyClone kernel and the version of the ArcPyClone kernel (3.9.16).

```
(ArcPyClone) F:\OneDrive - Louisiana State University\Analysis Code\Python Default Working Directory\GEOG-4057-GISProgramming\programming\geog4057_Hanqi\Assignment 2>
* History restored

Microsoft Windows [Version 10.0.22621.4169]
(c) Microsoft Corporation. All rights reserved.
(base) F:\OneDrive - Louisiana State University\Analysis Code\Python Default Working Directory\GEOG-4057-GISProgramming\programming\geog4057_Hanqi>conda activate ArcPyClone

(ArcPyClone) F:\OneDrive - Louisiana State University\Analysis Code\Python Default Working Directory\GEOG-4057-GISProgramming\programming\geog4057_Hanqi>python
Python 3.9.16 [MSC v.1931 64 bit (AMD64)] :: Anaconda, Inc. on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import arcpy
>>> print(arcpy.GetInstallInfo()['Version'])
3.1.2
>>>
```

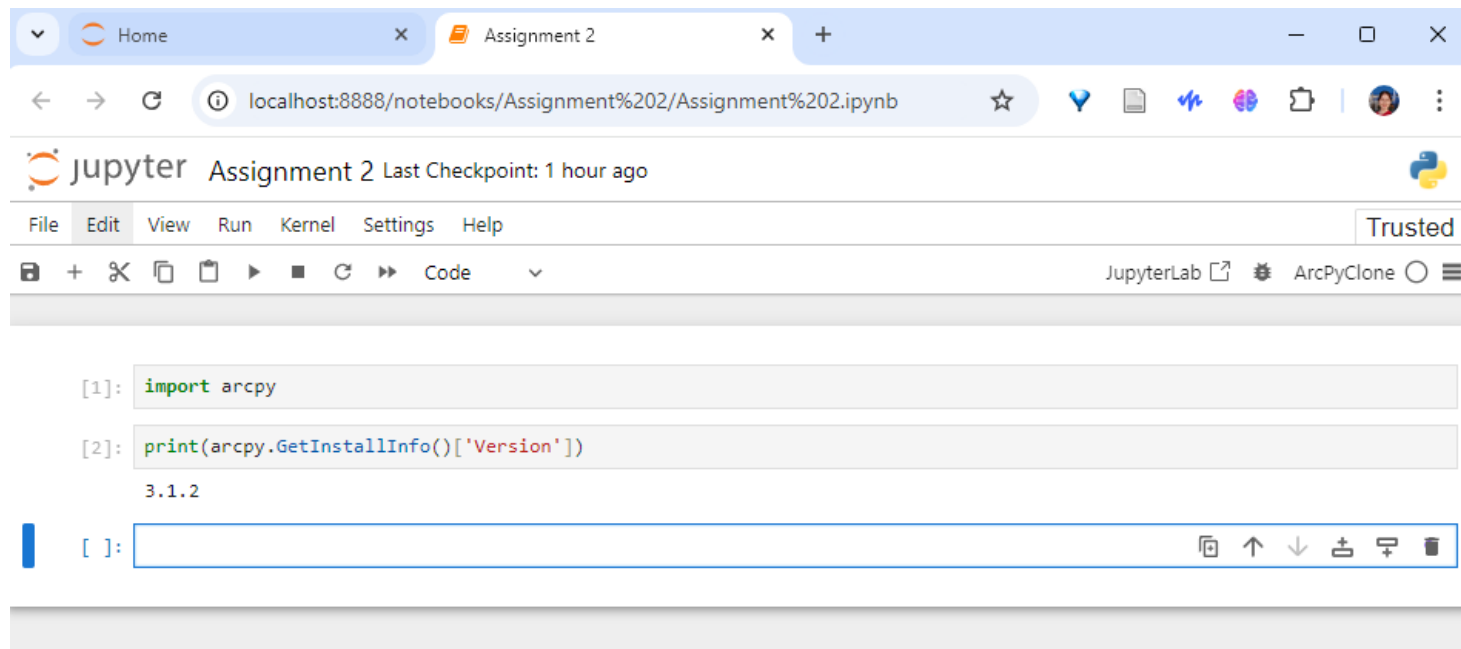
Command “import arcpy” can be executed in the Terminal with the kernel **ArcPyClone**.

```
Command Prompt - python
Microsoft Windows [Version 10.0.22621.4169]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hli69>conda activate ArcPyClone

(ArcPyClone) C:\Users\hli69>python
Python 3.9.16 [MSC v.1931 64 bit (AMD64)] :: Anaconda, Inc. on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import arcpy
>>> print(arcpy.GetInstallInfo()['Version'])
3.1.2
>>> |
```

Command “import arcpy” can be executed in the Jupyter Notebook with the kernel **ArcPyClone**.



The screenshot shows a web browser window with a Jupyter Notebook titled "Assignment 2". The address bar shows "localhost:8888/notebooks/Assignment%202/Assignment%202.ipynb". The Jupyter interface includes a menu bar (File, Edit, View, Run, Kernel, Settings, Help) and a toolbar. The notebook content shows two code cells: [1]: `import arcpy` and [2]: `print(arcpy.GetInstallInfo()['Version'])`. The output of the second cell is "3.1.2". The kernel is identified as "ArcPyClone" in the top right corner.

```
[1]: import arcpy

[2]: print(arcpy.GetInstallInfo()['Version'])
3.1.2

[ ]:
```

Try another command. Command “import pandas” cannot be executed with the kernel **ArcPyClone** in VS Code.

The screenshot shows the VS Code interface with a Jupyter notebook titled "Assignment 2.ipynb". The left sidebar contains the Explorer, Outline, and Timeline views. The top toolbar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The notebook has two cells. The first cell contains the code `import arcpy` and has failed with a red error message: "The Kernel crashed while executing code in the current cell or a previous cell. Please review the code in the cell(s) to identify a possible cause of the failure. Click [here](#) for more info. View Jupyter [log](#) for further details." The second cell contains the code `print(arcpy.GetInstallInfo()['Version'])` and has also failed. The third cell contains the code `import pandas as pd`, `data = {'Name': ['Alice', 'Bob', 'Charlie'], 'Age': [25, 30, 35]}`, `df = pd.DataFrame(data)`, and `print(df)`. This cell has succeeded, showing a green checkmark and the output:

	Name	Age
0	Alice	25
1	Bob	30
2	Charlie	35

. The bottom status bar shows the Jupyter kernel is running. The bottom panel displays the Jupyter log, which includes the following information: Visual Studio Code (1.93.1, undefined, desktop), Jupyter Extension Version: 2024.8.1, Python Extension Version: 2024.14.1, Pylance Extension Version: 2024.9.1, Platform: win32 (x64), and Temp. Storage folder: ~\AppData\Roaming\Code\User\globalStorage\ms-toolsai-jupyter\version-2024.8.1.

Assignment 2 > Assignment 2.ipynb > import pandas as pd

+ Code + Markdown | ▶ Run All ⏹ Restart 🗑 Clear All Outputs | 📄 Variables 📄 Outline ...

ArcPyClone (Python 3.9.16)

```
[1] import arcpy
```

Python

... The Kernel crashed while executing code in the current cell or a previous cell.

Please review the code in the cell(s) to identify a possible cause of the failure.

Click [here](#) for more info.

View Jupyter [log](#) for further details.

```
[ ] print(arcpy.GetInstallInfo()['Version'])
```

Python

```
[1] import pandas as pd

data = {
    'Name': ['Alice', 'Bob', 'Charlie'],
    'Age': [25, 30, 35],
}

df = pd.DataFrame(data)
print(df)
```

Python

...

	Name	Age
0	Alice	25
1	Bob	30
2	Charlie	35

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS JUPYTER

Jupyter

Visual Studio Code (1.93.1, undefined, desktop)

Jupyter Extension Version: 2024.8.1.

Python Extension Version: 2024.14.1.

Pylance Extension Version: 2024.9.1.

Platform: win32 (x64).

Temp. Storage folder: ~\AppData\Roaming\Code\User\globalStorage\ms-toolsai-jupyter\version-2024.8.1