## INSTALACIÓN Y PRUEBAS DE JUPYTER-LAB/NOTEBOOK

## INSTALANDO JUPYTER-LAB EN EL SISTEMA

1.- Instalaremos el *Jupyter-lab* desde la consola de Windows (Win+R) -> cmd



\*\* Es importante tener instalado Python 3.xx, ver el tutorial que se les pasó en pdf:



2.- Escribimos la siguiente línea de comandos:

```
C:\Users>pip install jupyterlab
```

3.- Empezarán a descargarse una serie de archivos y librerías:

```
C:\WINDOWS\system32\cmd.exe - pip install jupyterlab
 Downloading pywinpty-2.0.12-cp312-none-win amd64.whl.metadata (5.2 kB)
Collecting pyzmq>=24 (from jupyter-server<3,>=2.4.0->jupyterlab)
 Downloading pyzmq-25.1.2-cp312-cp312-win_amd64.whl.metadata (5.1 kB)
Collecting send2trash>=1.8.2 (from jupyter-server<3,>=2.4.0->jupyterlab)
 Downloading Send2Trash-1.8.2-py3-none-any.whl.metadata (4.0 kB)
Collecting terminado>=0.8.3 (from jupyter-server<3,>=2.4.0->jupyterlab)

Downloading terminado-0.18.0-py3-none-any.whl.metadata (5.8 kB)
Collecting websocket-client (from jupyter-server<3,>=2.4.0->jupyterlab)
 Downloading websocket_client-1.7.0-py3-none-any.whl.metadata (7.9 kB)
Collecting platformdirs>=2.5 (from jupyter-core->jupyterlab)
 Downloading platformdirs-4.2.0-py3-none-any.whl.metadata (11 kB)
ollecting pywin32>=300 (from jupyter-core->jupyterlab)
 Downloading pywin32-306-cp312-cp312-win_amd64.whl.metadata (6.5 kB)
Collecting babel>=2.10 (from jupyterlab-server<3,>=2.19.0->jupyterlab)
 Downloading Babel-2.14.0-py3-none-any.whl.metadata (1.6 kB)
Collecting json5>=0.9.0 (from jupyterlab-server<3,>=2.19.0->jupyterlab)
Downloading json5-0.9.17-py2.py3-none-any.whl.metadata (24 kB) collecting jsonschema>=4.18.0 (from jupyterlab-server<3,>=2.19.0->jupyterlab)
 Downloading jsonschema-4.21.1-py3-none-any.whl.metadata (7.8 kB)
Collecting requests>=2.31 (from jupyterlab-server<3,>=2.19.0->jupyterlab)
 Downloading requests-2.31.0-py3-none-any.whl.metadata (4.6 kB)
Collecting comm>=0.1.1 (from ipykernel->jupyterlab)
 Downloading comm-0.2.1-py3-none-any.whl.metadata (3.7 kB)
```

<sup>\*\*</sup> Hay que armarse de paciencia, tarda un poquito:

```
Downloading arrow-1.3.0-py3-none-any.whl (66 kB)

Downloading arrow-1.3.0-py3-none-any.whl (66 kB)

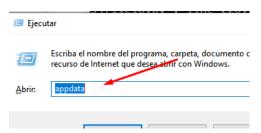
Downloading types_python_dateutil-2.8.19.20240106-py3-none-any.whl (9.7 kB)

Installing collected packages: webencodings, wcwidth, pywin32, pure-eval, fastjsonschema, websocket-rllib3, uri-template, types-python-dateutil, traitlets, tornado, tinycss2, soupsieve, sniffio, six, rfc3986-validator, pyzmq, pyyaml, pywinpty, python-json-logger, pygments, pycparser, psutil, prompt client, platformdirs, parso, pandocfilters, packaging, overrides, nest-asyncio, mistune, MarkupSafes, jsonpointer, json5, idna, h11, fqdn, executing, defusedxml, decorator, debugpy, colorama, charset, babel, attrs, async-lru, terminado, rfc3339-validator, requests, referencing, python-dateutil, mat ter-core, jinja2, jedi, httpcore, comm, cffi, bleach, beautifulsoup4, asttokens, anyio, stack-data, nals, jupyter-client, jsonschema-specifications, httpx, arrow, argon2-cffi-bindings, jsonschema, isc rgon2-cffi, nbformat, ipykernel, nbclient, jupyter-events, nbconvert, jupyter-server, notebook-shim, jupyter-lsp, jupyterlab
```

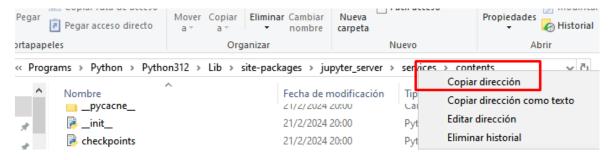
- 4.- Una vez instalado, lo ejecutaremos, siempre por la consola:
- \*\* Importante, para que funcione correctamente hay que correrlo desde donde se instaló el JupyterLab:
- 5.- Debemos ir hasta la siguiente <u>ruta</u>:

## C\Users\Videoteca\AppData\Local\Programs\Python\Python312\Lib\site-packages\jupyter\_server\services\contents

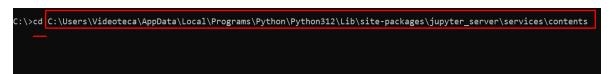
- \*\* Recuerden que en este caso "Videoteca" es un directorio de la computadora que estoy usando, en el caso de uds podría llamarse de otra manera.
- 6.- Para poder abrir AppData, desde el run (win+R), escriba:



\*\* Copie la ruta o dirección haciendo *clic derecho* en la ventana en donde buscó la ruta antes indicada:



7.- Escribamos el comando cd y pequemos la dirección:

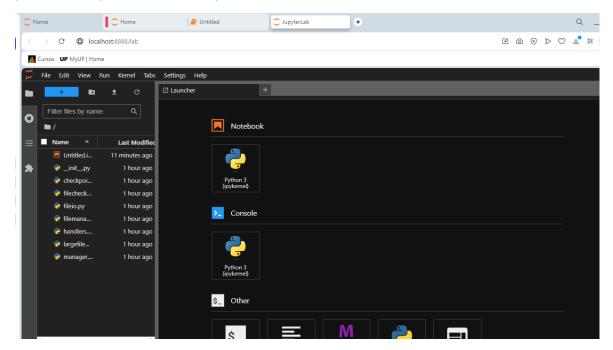


8. Luego desde esa ruta procedemos a ejecutar jupyter-lab:

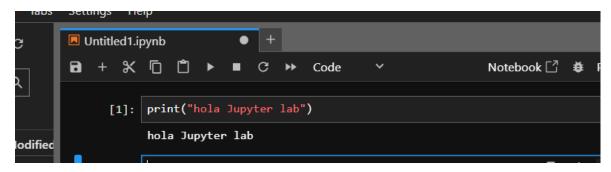
Esto dejará abierto de esta manera un servidor para poder tener funcionando el *Jupyter-lab*, no deben cerrarlo:

```
C:\WINDOWS\system32\cmd.exe - jupyter-lab
        <del>file:///C:/Users/videote</del>ca/AppData/Roaming/jupyter/runtime/jpserver-5720-open.htm
   Or copy and paste one of these URLs:
        http://localhost:8888/lab?token=10cc13476d08ce163fe01018e9ea1d34ed6225d541b37c95
        http://127.0.0.1:8888/lab?token=10cc13476d08ce163fe01018e9ea1d34ed6225d541b37c95
[I 2024-02-21 21:05:07.219 ServerApp] Skipped non-installed server(s): bash-language-serv
anguage-server, julia-language-server, pyright, python-language-server, python-lsp-server
ified-language-server, vscode-css-languageserver-bin, vscode-html-languageserver-bin, vsc
0.00s - Debugger warning: It seems that frozen modules are being used, which may
0.00s - make the debugger miss breakpoints. Please pass -Xfrozen_modules=off
0.00s - to python to disable frozen modules.
0.00s - Note: Debugging will proceed. Set PYDEVD_DISABLE_FILE_VALIDATION=1 to disable thi
[W 2024-02-21 21:05:13.548 LabApp] Could not determine jupyterlab build status without no
[I 2024-02-21 21:05:45.656 ServerApp] Creating new notebook in
[I 2024-02-21 21:05:48.289 ServerApp] Kernel started: c361d2c3-14e3-4855-8c4e-e8fabb2539b
0.00s - Debugger warning: It seems that frozen modules are being used, which may
0.00s - make the debugger miss breakpoints. Please pass -Xfrozen_modules=off
0.02s - to python to disable frozen modules.
```

9.- Por otro lado se abrirá el navegador predeterminado mostrando lo siguiente, podemos trabajar por consola o por un archivo de Python:



10.- Si elegiste un archivo de Python, ya podes ya utilizar la herramienta:



11.- Si llegaste hasta aquí es porque instalaste y corriste correctamente la herramienta de *JupyterLab*.

## **INSTALANDO JUPYTER NOTEBOOK**

1.- Para instalar debemos escribir lo siguiente en otra consola (no debe cerrar la otra ventana, puesto que está oficiando de **servidor** en este momento):

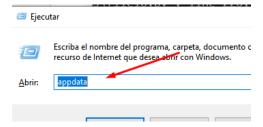


2.- Nos mostrará lo siguiente, es que descargo una serie de archivos y librerías en el sistema operativo:

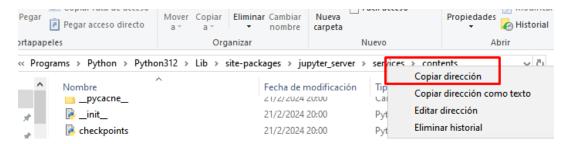
- 3.- Corremos el Notebook:
- \*\* Importante, para que funcione hay que correrlo desde donde se instaló el Jupyter Notebook:
- 4.- debe ir hasta la siguiente ruta:

C:\Users\Videoteca\AppData\Local\Programs\Python\Python312\Lib\site-packages\jupyter server\services\contents

- \*\* Recuerden que en este caso "Videoteca" es un directorio de la computadora que estoy usando, en el caso de uds podría llamarse de otra manera.
- 5.- Para poder abrir *Appdata*, desde el run (win+R), escriba:



\*\* Copiemos la ruta haciendo clic derecho en la ventana en donde buscó la ruta antes indicada:



6.- Escribamos el comando cd y peguemos la dirección. Luego escribamos el comando jupyternotebook:

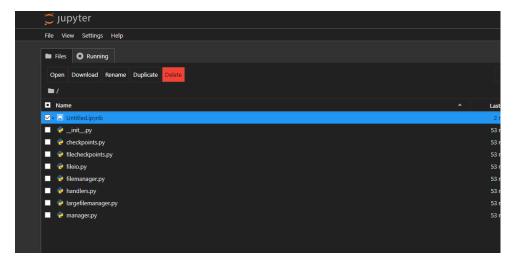
```
C:\>cd C:\Users\Videoteca\AppData\Local\Programs\Python\Python312\Lib\site-packages\jupyter_server\services\contents
C:\Users\Videoteca\AppData\Local\Programs\Python\Python312\Lib\site-packages\jupyter_server\services\contents>jupyter notebook
```

7.- Nos mostrará que está abriendo otro servidor:

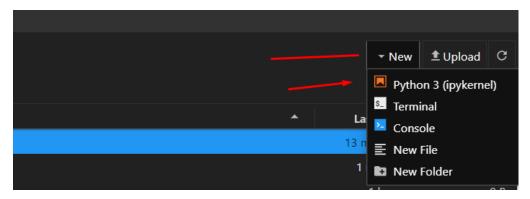
```
raise Exception(msg) from None
Exception: This extension doesn't have any static paths listed. Check that the extension's `static_paths` trait is
[W 2024-02-21 20:51:53.553 TerminalsExtensionApp] 404 GET /terminals/websocket/1 (037e4d6cc03648878af456bf31311670@::1)
[I 2024-02-21 20:51:54.346 ServerApp] Creating new notebook in
[I 2024-02-21 20:52:05.773 ServerApp] Kernel started: 34e2164f-74d2-437e-ad20-aef426f6f9c2
0.00s - Debugger warning: It seems that frozen modules are being used, which may
0.00s - make the debugger miss breakpoints. Please pass -Xfrozen_modules=off
0.00s - to python to disable frozen modules.

Note: Debugging will proceed. Set PYDEVD_DISABLE_FILE_VALIDATION=1 to disable this validation.
[I 2024-02-21 20:52:07.335 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[I 2024-02-21 20:52:07.365 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[I 2024-02-21 20:52:07.365 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[W 2024-02-21 20:52:07.365 ServerApp] Got events for closed stream <zmq.eventloop.zmqstream.ZMQStream object at 0x000000 [W 2024-02-21 20:52:07.533 ServerApp] Got events for closed stream <zmq.eventloop.zmqstream.ZMQStream object at 0x000000 [W 2024-02-21 20:52:07.438 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[I 2024-02-21 20:52:07.533 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[I 2024-02-21 20:52:07.5358.550 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[I 2024-02-21 20:53:58.550 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[I 2024-02-21 20:53:58.550 ServerApp] Connecting to kernel 34e2164f-74d2-437e-ad20-aef426f6f9c2.
[I 2024-02-21 20:53:58.550 ServerApp] Saving file at /Untitled.jpynb
[I 2024-02-21 21:07:49.529 ServerApp] Saving file at /Untitled2.ipynb
```

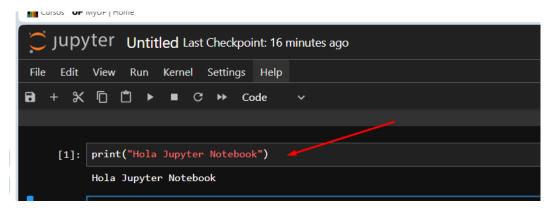
8.- Con ello se abrirá el navegador prederminado que nos mostrará:



9.- Y ya podemos hacer uso de esta excelente herramienta:



10.- Elegimos Python 3 y ya se puede trabajar en Python:



11.- Si llegaste hasta aquí es porque instalaste y corriste correctamente la herramienta de *Jupyter Notebook*.