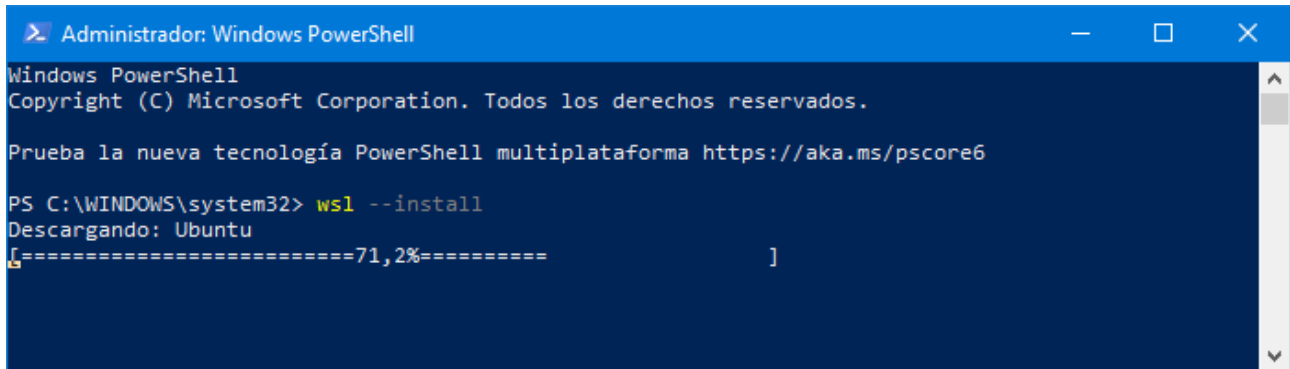## 1. Install Ubuntu on WSL (Windows Subsystem for Linux) for Windows 10/11

- To install WSL, you must run PowerShell or Command Prompt as an administrator. If you're using Windows 10, make sure it's updated.
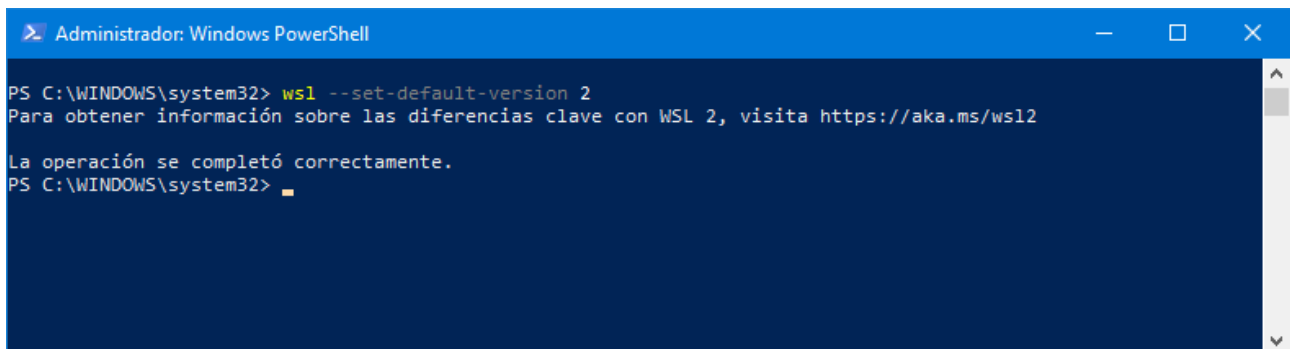- Run this command in PowerShell and then restart your machine:

    wsl --install

- Upgrade version from WSL 1 to WSL 2 (if you are using Windows 10):

    wsl --set-default-version 2

- To start using WSL, type: wsl

3. Install Anaconda

Find the latest version of Anaconda for Python 3 at **https://repo.anaconda.com/archive**. Start Ubuntu and type:

```
cd /tmp
curl https://repo.anaconda.com/archive/Anaconda3-2024.10-1-Linux-x86_64.sh --output anaconda.sh
bash anaconda.sh
```


Accept the license terms and once installation is complete type yes so that you can initialize Anaconda3.

Add the following line to .bash_profile, initialize conda and reopen wsl:

```
export PATH=~/anaconda3/bin:$PATH
conda init
exit
wsl
```

```
jesus@DESKTOP-41T2C03:/tmp$ export PATH=~/anaconda3/bin:$PATH
jesus@DESKTOP-41T2C03:/tmp$ conda init
no change        /home/jesus/anaconda3/condabin/conda
no change        /home/jesus/anaconda3/bin/conda
no change        /home/jesus/anaconda3/bin/conda-env
no change        /home/jesus/anaconda3/bin/activate
no change        /home/jesus/anaconda3/bin/deactivate
no change        /home/jesus/anaconda3/etc/profile.d/conda.sh
no change        /home/jesus/anaconda3/etc/fish/conf.d/conda.fish
no change        /home/jesus/anaconda3/shell/condabin/Conda.psm1
no change        /home/jesus/anaconda3/shell/condabin/conda-hook.ps1
no change        /home/jesus/anaconda3/lib/python3.12/site-packages/xontrib/conda.xsh
no change        /home/jesus/anaconda3/etc/profile.d/conda.csh
modified         /home/jesus/.bashrc

==> For changes to take effect, close and re-open your current shell. <==

jesus@DESKTOP-41T2C03:/tmp$ exit
logout
PS C:\WINDOWS\system32> wsl
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

(base) jesus@DESKTOP-41T2C03:/mnt/c/WINDOWS/system32$
```
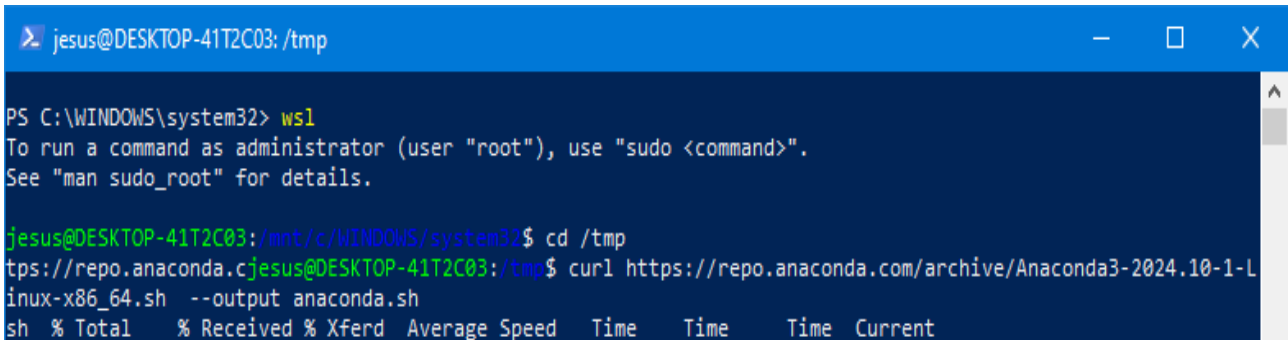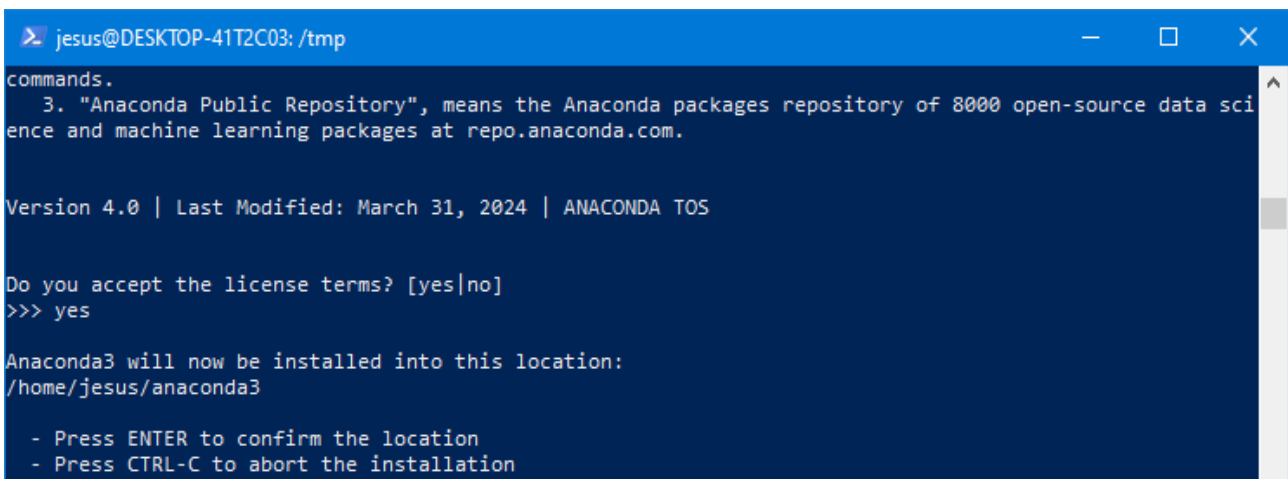
4. Install ISP.

See the detailed instructions in the following link:

https://projectisp.github.io/ISP_tutorial.github.io/install/#installation

cd ~
git clone --depth 1 --branch master --single-branch https://github.com/ProjectISP/ISP.git

```
jesus@DESKTOP-41T2C03:~$ git clone --depth 1 --branch master --single-branch https://github.com/Project
ISP/ISP.git
```

cd ~/ISP
git pull --depth 1
cd ~/ISP/install
chmod u+x ISP_installer.sh
./ISP_installer.sh

```
jesus@DESKTOP-41T2C03:~/ISP$ cd ~/ISP/install
jesus@DESKTOP-41T2C03:~/ISP/install$ chmod u+x ISP_installer.sh
jesus@DESKTOP-41T2C03:~/ISP/install$ ./ISP_installer.sh
No 'isp' environment found. Proceeding to create one.
Operating System detected: Linux
Linux detected.
Using Conda environment file: ./linux_installer/linux_environment.yml
/home/jesus/anaconda3/lib/python3.12/argparse.py:2006: FutureWarning: `remote_definition` is deprecated
 and will be removed in 25.9. Use `conda env create --file=URL` instead.
  action(self, namespace, argument_values, option_string)
Channels:
 - conda-forge
 - defaults
```



```
sorflow-io-gcs-filesystem-0.36.0 termcolor-2.4.0 typing-extensions-4.10.0 tzdata-2024.1 tzlocal-5.2 url
lib3-2.2.1 werkzeug-3.0.1 wrapt-1.14.1 zipp-3.17.0

done
#
# To activate this environment, use
#
#     $ conda activate isp
#
# To deactivate an active environment, use
#
#     $ conda deactivate

ISP environment process finished
Which type of installation would you prefer, conventional or advanced ? Create alias for ISP in your sh
ell configuration? [Y/n]
To run ISP, execute isp.sh at /home/jesus/ISP/install/..
Installation complete!
jesus@DESKTOP-41T2C03:~/ISP/install$
```

Before starting ISP, install these packages:
sudo apt update
sudo apt install libqt5x11extras5
sudo apt-get install libpulse-dev

and refresh your path:
source ~/.bashrc
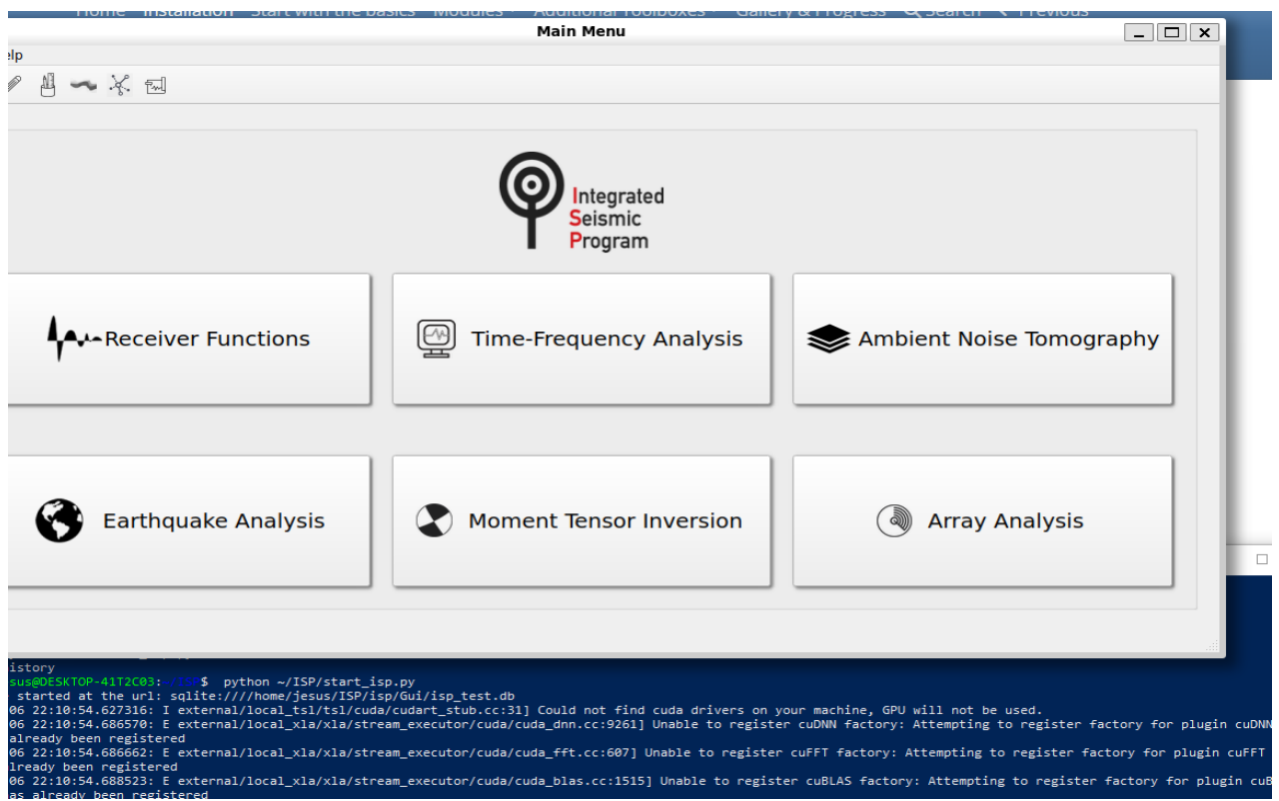
Start ISP:

conda activate isp
python ~/ISP/start_isp.py

Modify your shell configuration file (.bashrc) to automatically activate your environment when WSL starts:
echo "conda activate isp" >> ~/.bashrc
source ~/.bashrc

From now on, use the command "isp" to start the program when you restart WSL.
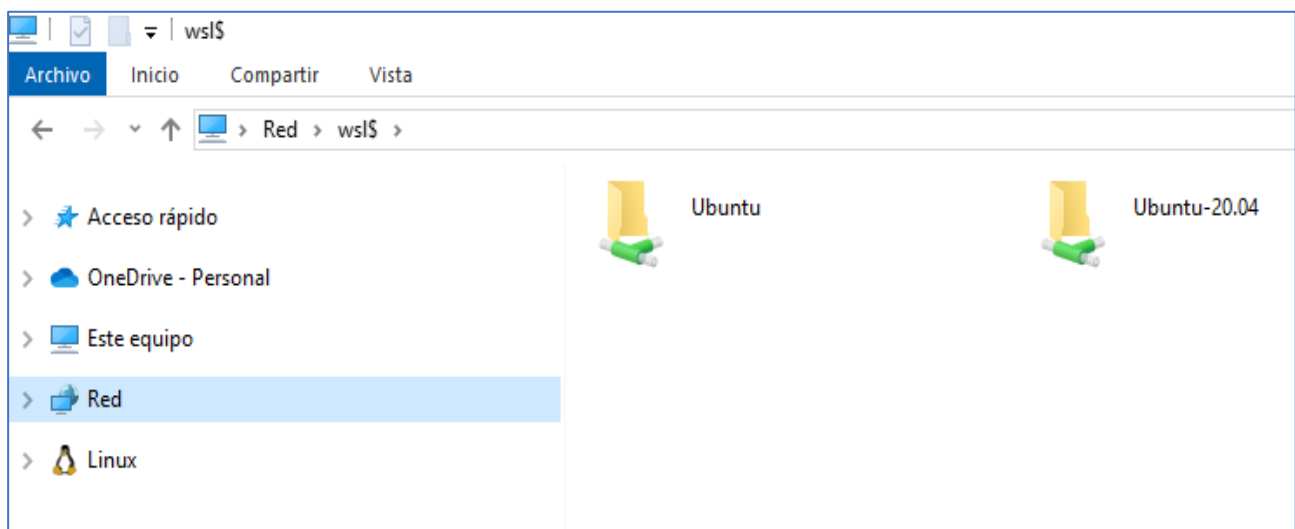
5. Sharing Files Between Windows and WSL

Accessing WSL Files from Windows

a. You can access WSL files directly through the Windows File Explorer by typing the following in the address bar:

\\wsl$

You'll see a list of installed Linux distributions. Navigate to the folders you need.

b. Alternatively, you can access the files from the WSL terminal by running the following command:

explorer.exe .

This will open the Windows File Explorer, allowing you to view and work with the files stored in WSL.

Accessing Windows Files from WSL

Windows drives are automatically mounted under /mnt. To access your Windows files from WSL, replace <your_username> with your actual username and run the following command:

cd /mnt/c/Users/<your_username>