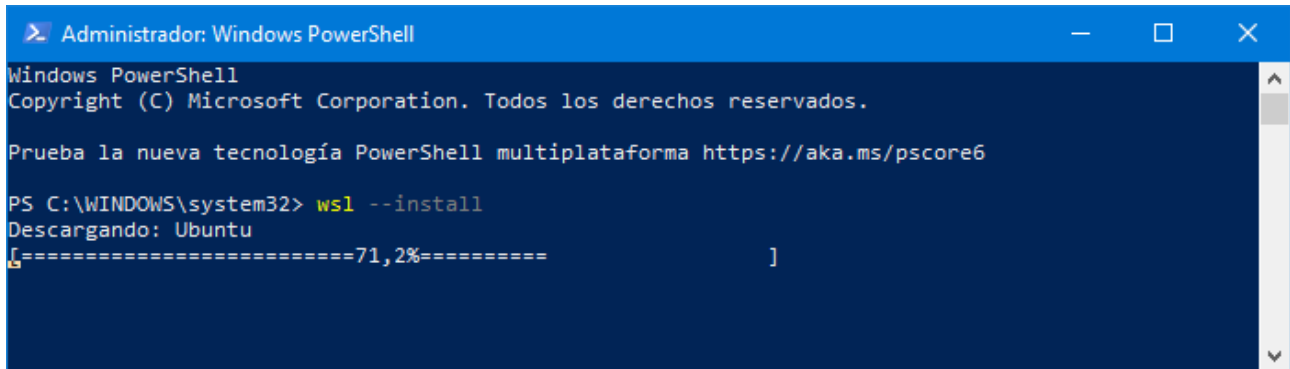


1. Install Ubuntu on WSL (Windows Subsystem for Linux) for Windows 10/11

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

```
wsl --install
```



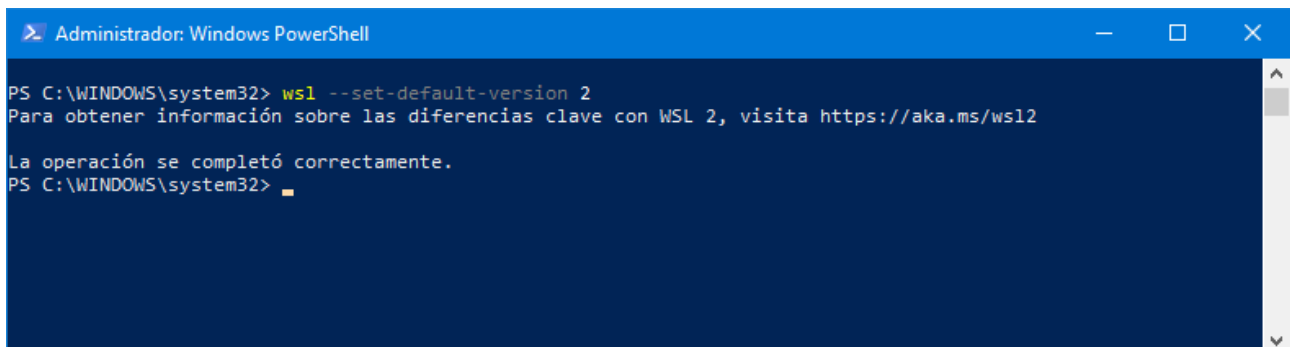
```
Administrador: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. Todos los derechos reservados.

Prueba la nueva tecnología PowerShell multiplataforma https://aka.ms/pscore6

PS C:\WINDOWS\system32> wsl --install
Descargando: Ubuntu
[=====71,2%=====]
```

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

```
wsl --set-default-version 2
```

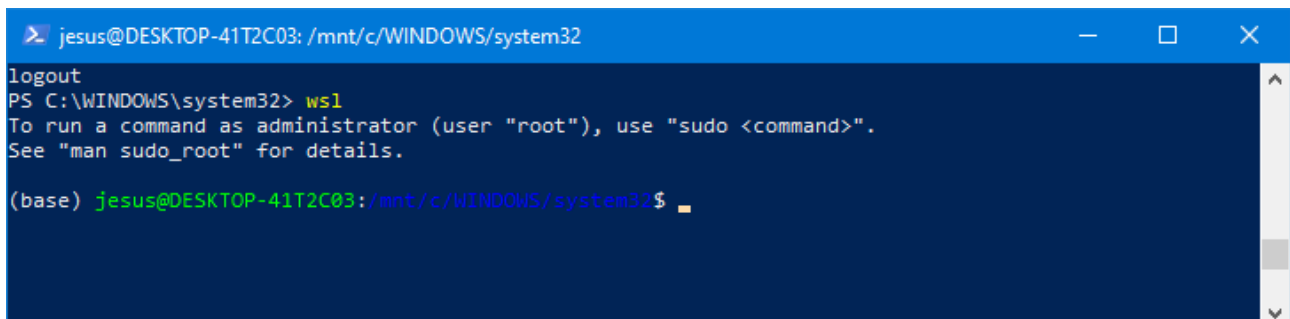


```
Administrador: Windows PowerShell

PS C:\WINDOWS\system32> wsl --set-default-version 2
Para obtener información sobre las diferencias clave con WSL 2, visita https://aka.ms/ws12

La operación se completó correctamente.
PS C:\WINDOWS\system32>
```

- To start using WSL, type: `wsl` .



```
jesus@DESKTOP-41T2C03: /mnt/c/WINDOWS/system32
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$
```

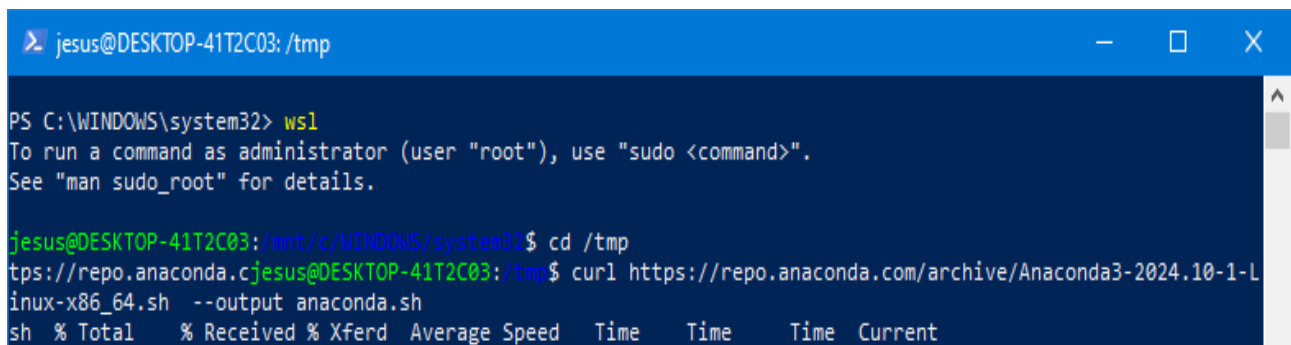
3. Install Anaconda

Now that you are inside WSL, download the latest version of Anaconda for Python 3 from <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
```

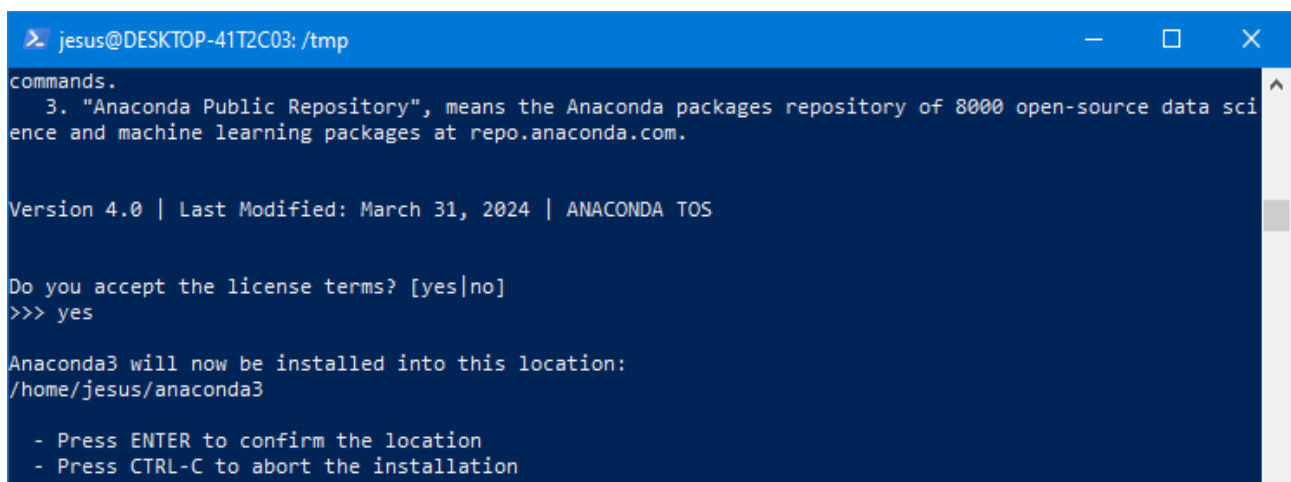
```
bash anaconda.sh
```



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

jesus@DESKTOP-41T2C03:/mnt/c/WINDOWS/system32$ cd /tmp
tps://repo.anaconda.cjesus@DESKTOP-41T2C03:/tmp$ curl https://repo.anaconda.com/archive/Anaconda3-2024.10-1-L
linux-x86_64.sh --output anaconda.sh
sh % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
```

Accept the license terms. When the installation is complete, type **yes** to initialize Anaconda3.



```
jesus@DESKTOP-41T2C03: /tmp
commands.
  3. "Anaconda Public Repository", means the Anaconda packages repository of 8000 open-source data sci
ence and machine learning packages at repo.anaconda.com.

Version 4.0 | Last Modified: March 31, 2024 | ANACONDA TOS

Do you accept the license terms? [yes|no]
>>> yes

Anaconda3 will now be installed into this location:
/home/jesus/anaconda3

- Press ENTER to confirm the location
- Press CTRL-C to abort the installation
```

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

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

```
jesus@DESKTOP-41T2C03: /mnt/c/WINDOWS/system32
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
```

Before running the installer, you should install some compilation tools:

```
sudo apt-get update
```

```
sudo apt-get install -y build-essential
```

```
sudo apt-get install -y pkg-config
```

These packages provide the basic compilers and utilities required to build Python extensions and other dependencies.

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

```
cd ~/ISP
```

```
git pull --depth 1
```

```
cd ~/ISP/install
```

```
chmod u+x ISP_installer.sh
```

./ISP_installer.sh

```
jesus@DESKTOP-41T2C03: ~/ISP/install
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
```

```
jesus@DESKTOP-41T2C03: ~/ISP/install
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 the following system packages:

```
sudo apt-get update
sudo apt-get install xdg-utils
sudo apt install libqt5x11extras5
sudo apt-get install libpulse-dev
```

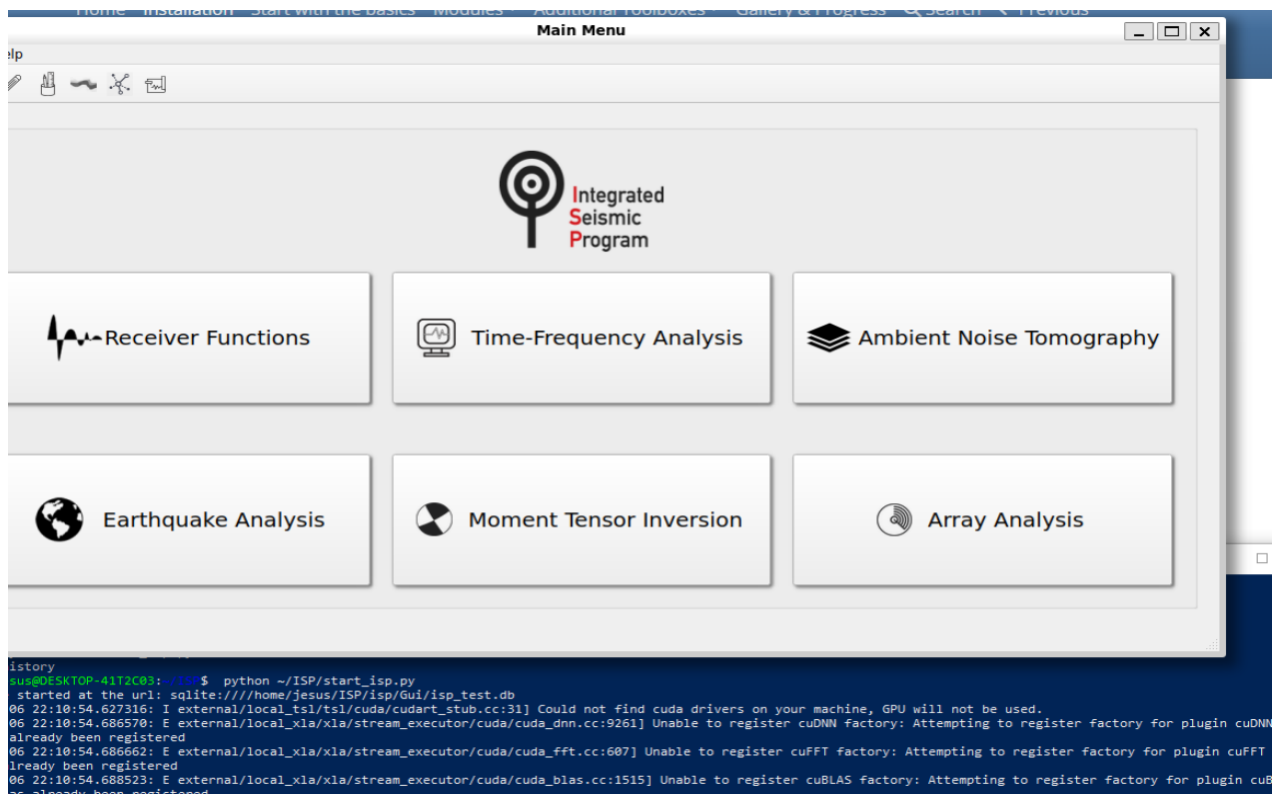
Start ISP:

```
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, you can use the command `isp` to start the program whenever you restart WSL.



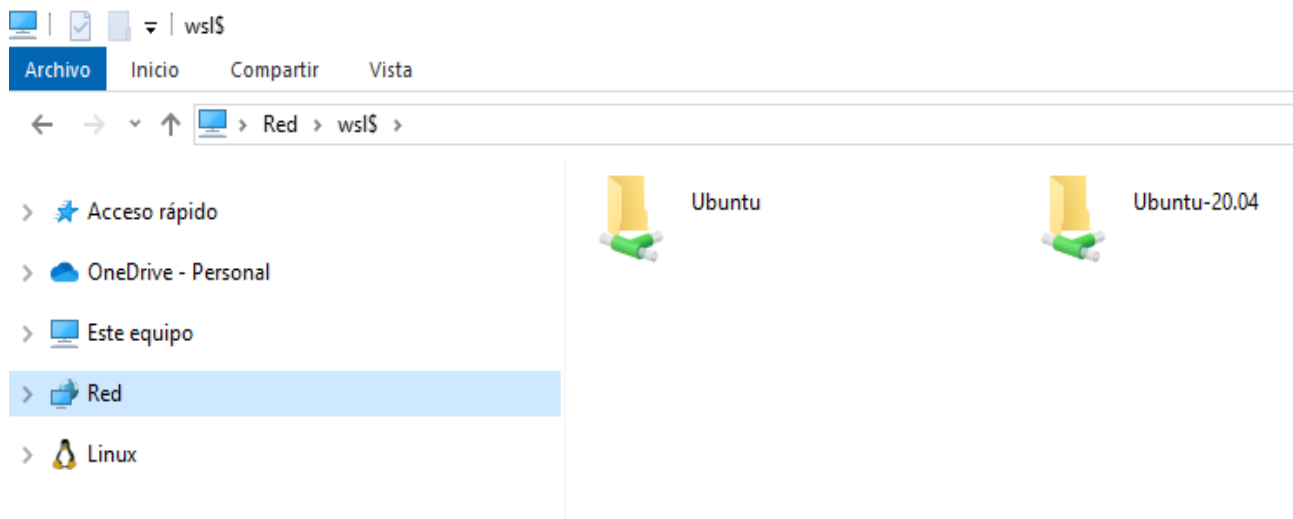
5. Sharing Files Between Windows and WSL

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>
```