Setting up the Python Environment:

1. Installing Unix Shell (Git Bash)

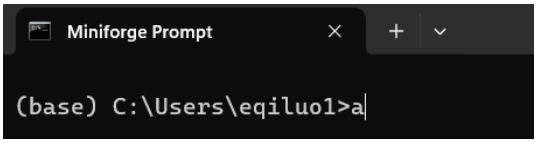
    a. Go to the git website and download '**64-bit Git for Windows Setup**' - double click the installer and accept the default settings

2. Installing Miniforge/Mamba:

    a. Go to the miniforge repo, from the *Windows installers* select '*Miniforge3-Windows-x86_64*' to download; (*if you are a MAC user, select the Mac version*)
    b. run the .exe file;
    c. Follow the instructions on the screen to finish installation

3. Launch Miniforge and Create Environment for our workshop:

    a. On the start menu, type 'mini…' and open the *Miniforge Prompt*
    b. When you open the prompt, it should look something like this:



    c. Next, we need to create a python environment, type `mamba create -n geosci-env python=3.11` and hit enter (here 'geosci-env' is just an example, you can name your environment accordingly)
    d. mamba will take time to prepare the set-up, once ready, confirm with 'y' and hit enter

4. Installing python packages at our env:

    a. First, activate our workshop env by typing `mamba activate geosci-env` and hit enter
    b. Once activated, you can see the parentheses before the file path changed from 'base' to 'geosci-env' - it should look similar to:

```
(geosci-env) C:\Users\eqiluo1>
```

    c. Now, copy and paste the following command to your miniforge prompt and hit enter, this will install all the necessary python packages for our workshop:

```
mamba install numpy pandas matplotlib shapely geopandas
rasterio seaborn rasterstats xarray dask rioxarray
earthengine-api geemap notebook jupyterlab -c conda-forge
```

    NOTE: IF THE INTERNET IS NOT STABLE, YOU CAN BREAK THE ABOVE LINE TO INSTALL PACKAGES SEPARATELY

    d. This may take some seconds for mamba to prepare, but once ready, type y and confirm
5. Launch Jupyter Notebook / Lab from your environment
    a. First, make sure you are in the correct python environment (if not, you need to first use 'mamba activate …' to activate your python environment)
    b. Then, in the command prompt, type `jupyter notebook` or `jupyter lab` , and hit enter to launch the jupyter interface for coding!

FOR ANACONDA/CONDA USER:

If you already have anaconda/miniconda installed in your PC, you can use the '*anaconda prompt*' (find them from the start menu), and replace the 'mamba' command with 'conda' - this will also set up the python environment. Important thing is to not forget type `'-c conda-forge` '' when installing the packages.

For example: `conda install numpy pandas matplotlib shapely geopandas rasterio seaborn rasterstats xarray dask rioxarray earthengine-api geemap notebook jupyterlab -c conda-forge`