# Setting up a Professional Data Science Environment - Configuring Git and Anaconda

1. Install Git and Anaconda
2. In your terminal window*(the Terminal app for Mac, and the Git Bash program for Windows), type `git config --global user.name`
    a. If it returns your name, you're set!
    b. If it returns nothing or displays an error message, type `git config --global user.name "Your Name"` - replacing Your Name with your name inside the quotes (this should be your real first and last name, not your GitHub username)
3. In your terminal window, type `git config --global user.email`
    a. If it returns your email address, you're set!
    b. If it returns nothing or displays an error message, type `git config --global user.email your@email.com` - replacing your@email.com with your email address

## Cloning this Repository

1. Open a new terminal window
2. Type `pwd` - this should show your home directory, the most basic of paths on your computer
3. Type `cd Documents` - this will change your directory, and move you into your Documents folder
4. Type `mkdir Flatiron` - this will create a new folder, called Flatiron, to keep all of your Flatiron repositories and files
5. Type `cd Flatiron` - this will change your directory, moving you into the new Flatiron folder you just created

```
William@Williams MINGW64 ~ (main)
$ cd onedrive

William@Williams MINGW64 ~/onedrive (main)
$ cd Document
bash: cd: Document: No such file or directory

William@Williams MINGW64 ~/onedrive (main)
$ cd Documents

William@Williams MINGW64 ~/onedrive/Documents (main)
$ mkdir Flatiron

William@Williams MINGW64 ~/onedrive/Documents (main)
$ cd Flatiron

William@Williams MINGW64 ~/onedrive/Documents/Flatiron (main)
$ git status
```

Clone once you in Flatiron directory

`git clone`
https://github.com/learn-co-curriculum/dsc-data-science-env-config.git

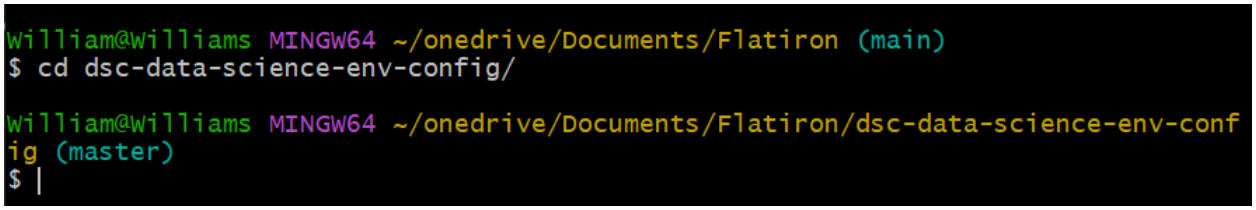
```
William@Williams MINGW64 ~/onedrive/Documents/Flatiron (main)
$ git clone https://github.com/learn-co-curriculum/dsc-data-science-env-config.g
it
Cloning into 'dsc-data-science-env-config'...
remote: Enumerating objects: 149, done.
remote: Counting objects: 100% (57/57), done.
remote: Compressing objects: 100% (34/34), done.
remote: Total 149 (delta 41), reused 26 (delta 21), pack-reused 92
Receiving objects: 100% (149/149), 3.45 MiB | 679.00 KiB/s, done.
Resolving deltas: 100% (65/65), done.

William@Williams MINGW64 ~/onedrive/Documents/Flatiron (main)
```

The clone above will create a new subdirectory whose name is "dsc-data-science-env-config" which will contain a copy of all of the files in this repository!

Move to this dsc-data-science-env-config subdirectory using

cd dsc-data-science-env-config




Now create the virtual environment. If it doesn't work then check below.

### Creating the Conda Virtual Environment

First, ensure the path is included..

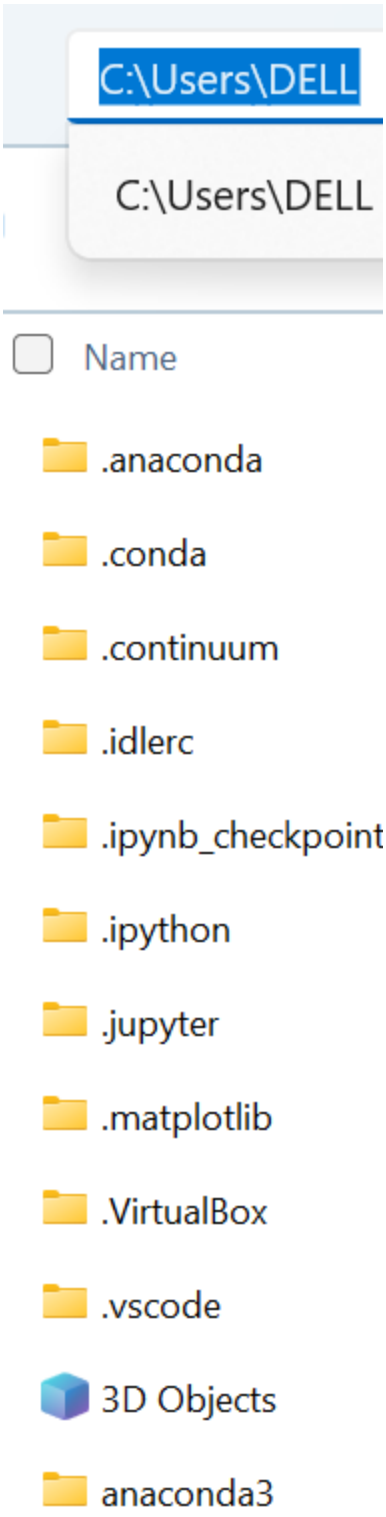
1. Verify PATH Environment Variable:
    - If you have Anaconda installed, ensure its path is included in your system's PATH variable:
        - Windows:
            - Open System Properties (search for "environment variables").
            - Under the "Advanced" tab, click "Environment Variables".
            - Edit the "Path" variable and append the path to your Anaconda installation's `Scripts` directory (e.g., `C:\Users\YourUserName\Anaconda3\Scripts`).# Change your username to match your laptop's name. Check this on your laptop
            - To get the path, use the command where conda  anaconda prompt. Then copy Scripts path.

```
(base) C:\Users\DELL>where conda
C:\Users\DELL\anaconda3\Library\bin\conda.bat
C:\Users\DELL\anaconda3\Scripts\conda.exe
C:\Users\DELL\anaconda3\condabin\conda.bat
```

Copy and paste this line to the environment variable

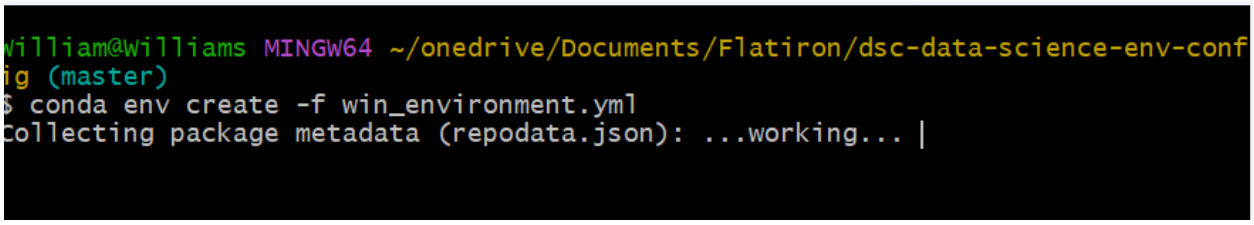
```
C:\Users\DELL\anaconda3\Scripts
```

Or use the below method to get the Scripts path

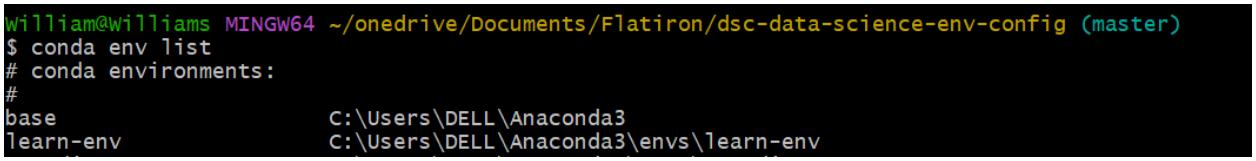

C:\Users\DELL
C:\Users\DELL
Name
.anaconda
.conda
.continuum
.idlerc
.ipynb_checkpoint
.ipython
.jupyter
.matplotlib
.VirtualBox
.vscode
3D Objects
anaconda3

- macOS/Linux:
  - Open a terminal and edit your shell profile file (e.g., `~/.bashrc` or `~/.zshrc`).
  - Add this line: `export PATH="/path/to/anaconda/bin:$PATH"` (replace with the actual path).
- Restart your terminal session for changes to take effect.

You can now create the venv using gitbash in Windows




After it's done, check and update the env using the conda env list command.



Update Anaconda and initialize the env first if you face issues doing so.

a. Update using

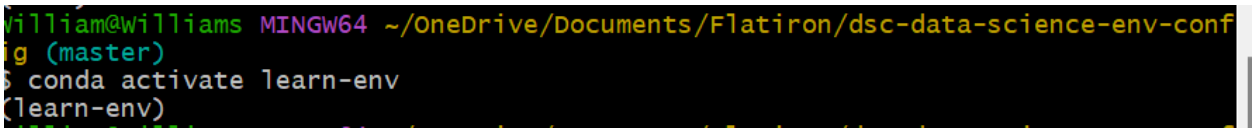
```
conda update conda
```

b. Initialize the bash

```
conda init bash
```

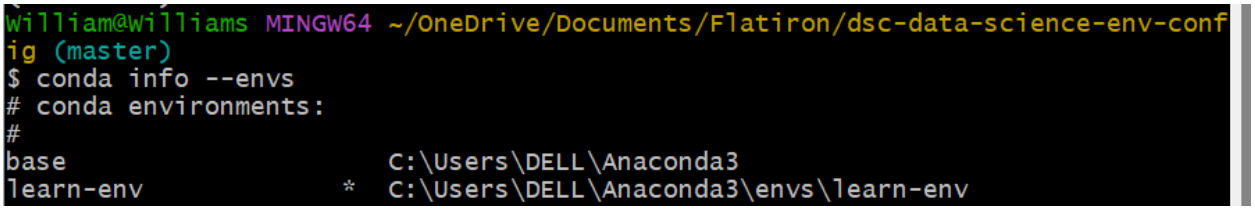
Once done, exit the bash and restart for the changes to take effect.

Activate the environment




To confirm it worked

To confirm that it worked, type `conda info --envs` and confirm that the asterisk (*) is next to the learn-env environment.




## Setting your Default Environment

You have successfully created your virtual environment! But, to be sure you are using the learn-env, it's helpful to set it as your default environment so that you don't need to switch to it every time you open the terminal manually. This step is **highly recommended** but not required.

### Windows

To follow these instructions on a Windows machine, you must be using the Git Bash shell, which was suggested to install above.

1. Run `touch ~/.bash_profile` to create a new file.
2. Run `echo "conda activate learn-env" >> ~/.bash_profile` to add the configuration to your bash profile
3. Run `source ~/.bash_profile` to activate the changes you just made