Great question — to **completely and cleanly remove Python 3.12 (or any old version)** from your system (including pip, registry entries, and environment paths), follow the steps below based on your OS:

# **M** For Windows: Complete Python Uninstallation

### Step 1: Use the Windows Uninstaller

- 1. Open Control Panel → Programs → Programs and Features
- 2. Find Python 3.12.X in the list
- 3. Click Uninstall

This removes the bulk of the files, but not everything.

## **Step 2: Manually Delete Remaining Files**

#### M A. Remove leftover folders:

Delete these folders if they exist:

C:\Users\<YourUsername>\AppData\Local\Programs\Python

C:\Users\<YourUsername>\AppData\Local\Programs\Python\Python312

C:\Users\<YourUsername>\AppData\Roaming\Python

C:\Users\<YourUsername>\AppData\Local\pip

■ You can paste %LocalAppData% or %AppData% into File Explorer's address bar to open those locations quickly.

#### 

- 1. Press Windows + S → Search for Environment Variables
- 2. Click "Edit the system environment variables"
- ${\it 3. \ } \ \hbox{In the System Properties window, click } \textbf{Environment Variables}$
- 4. Under "System variables" or "User variables", find Path
- 5. Look for entries like:

C:\Users\<YourUsername>\AppData\Local\Programs\Python\Python312\
C:\Users\<YourUsername>\AppData\Local\Programs\Python\Python312\Scripts\

6. Remove them

Also, if you see a variable named PYTHONPATH, delete it too (if it's related to 3.12).

#### M Step 4: Confirm Removal

In a new terminal, check:

```
python --version
pip --version
```

If Python is fully removed, these commands should show an error like:

```
'python' is not recognized as an internal or external command... % \begin{array}{c} \left( \left( \frac{1}{2}\right) -\left( \frac{1}{2
```

## Step 5: Install New Python Version

- Go to https://www.python.org/downloads/
- Install the latest version
- · Check these boxes during installation:
  - ✓ Add Python to PATH
  - ∘ ✓ Install pip

Let me know if you're on **Linux or macOS**, and I'll give the steps for that too.

Would you like a cleanup script (for advanced users) to delete old Python folders automatically?