# Setup Python Environment on Mac

## 1. Download and Install Python 3.12

1. **Download Python 3.12:**
   - Go to the [Python Downloads page](#).
   - Click on the macOS installer for Python 3.12 to download the `.pkg` file.
2. **Install Python 3.12:**
   - Open the downloaded `.pkg` file and follow the installation prompts.

## 2. Download and Install Visual Studio Code (VS Code)

1. **Download VS Code:**
   - Go to the [VS Code Downloads page](#).
   - Download the macOS version of VS Code.
2. **Install VS Code:**
   - Open the downloaded `.zip` file and drag the VS Code app to your Applications folder.

## 3. Check and Update Path

1. **Check the Path:**

Open Terminal and check where Python is installed:
bash
Copy code
```bash
which python3.12
```

   -

2. **Update the Path in `.zshrc`:**

Open `.zshrc` in a text editor:
bash
Copy code
```bash
nano ~/.zshrc
```

   -

Add the following line to include Python in your PATH:
bash
Copy code

```
export
PATH="/Library/Frameworks/Python.framework/Versions/3.12/bin:$PATH"
```

- ○
    - ○ Save and exit (`CTRL + O`, `Enter`, `CTRL + X`).
3. **Create Symlink for Python:**

Create a symbolic link for `python` to point to `python3.12`:
bash

```
sudo ln -s
/Library/Frameworks/Python.framework/Versions/3.12/bin/python3.12
/usr/local/bin/python
```

- ○
4. **Reload `.zshrc`:**

Apply changes:
bash
Copy code
```
source ~/.zshrc
```

- ○

## 4. Verify Installation

**Check Python Version:**
bash
Copy code
```
python --version
python3 --version
```

1.
2. **Check VS Code:**
    - ○ Open VS Code from Applications or using Spotlight (`Cmd + Space`, then type "Visual Studio Code").

# Setup Python Environment on Windows

## 1. Download and Install Python

1. **Download Python:**
   - Go to the [Python Downloads page](#).
   - Click on the Windows installer for Python 3.12 to download the `.exe` file.
2. **Install Python:**
   - Run the downloaded `.exe` file.
   - **Important:** Check the box that says "Add Python to PATH" before clicking "Install Now."
   - Follow the installation prompts to complete the installation.

## 2. Download and Install Visual Studio Code (VS Code)

1. **Download VS Code:**
   - Go to the [VS Code Downloads page](#).
   - Download the Windows version of VS Code.
2. **Install VS Code:**
   - Run the downloaded `.exe` file and follow the installation prompts.

## 3. Verify and Update Path

1. **Check Python Path:**

Open Command Prompt or PowerShell and run:
cmd
Copy code

```
where python
where python3
```

   -
2. **Update Path (if needed):**
   - If Python is not found, you might need to add it to your system PATH manually:
     - Right-click on `This PC` or `Computer` on the Desktop or in File Explorer.
     - Select `Properties` > `Advanced system settings`.
     - Click `Environment Variables`.

- In the `System variables` section, find and select the `Path` variable, then click `Edit`.
- Add the path to the Python installation directory (e.g., `C:\Users\<YourUsername>\AppData\Local\Programs\Python\Python312\`).
- Click `OK` to save the changes.

## 4. Verify Installation

1. **Check Python Version:**

Open Command Prompt or PowerShell and run:
cmd
Copy code

```
python --version
python3 --version
```

   - 
2. **Check VS Code:**
   - Open VS Code from the Start Menu or by searching for it.