Step 1: Install Python

- 1. Go to https://www.python.org/downloads/
- 2. Download the latest version for your OS.
- 3. IMPORTANT: During installation, check the box "Add Python to PATH".
- 4. Complete the installation.

♦ Step 2: Install Visual Studio Code (VS Code)

- 1. Visit https://code.visualstudio.com/
- 2. Download and install VS Code for your OS.

♥ Step 3: Install Python Extension in VS Code

- 1. Open VS Code.
- 2. Go to Extensions (Ctrl+Shift+X).
- 3. Search for Python by Microsoft and click Install.
- 4. Also install the Jupyter extension by Microsoft.

♦ Step 4: Open Terminal in VS Code

- 1. Open VS Code.
- 2. Go to **Terminal > New Terminal** (or press Ctrl+`).

∜ Step 5: Install Jupyter via pip

In the terminal, run:

```
pip install notebook
```

♦ Optional: Install additional Jupyter tools (for notebooks inside VS Code):

pip install jupyterlab

♦ Step 6: Create/Open a .ipynb file

- 1. Inside VS Code, click on File > New File.
- 2. Save it as example.ipynb.
- 3. VS Code will automatically detect it as a Jupyter notebook.
- 4. You can now run code cells inside VS Code!

Step 7: Run Jupyter Notebook in Browser (Optional)

If you want to run notebooks in the browser instead of VS Code:

jupyter notebook

This will open the notebook in your default web browser.

1. PyCharm Community Edition

- **Download**: https://www.jetbrains.com/pycharm/download/
- Installation Guide: https://www.jetbrains.com/help/pycharm/installation-guide.html

PyCharm Community Edition is a free, open-source IDE tailored for Python development. It supports essential features like code completion, debugging, and version control integration. Note that advanced web development tools are available in the Professional Edition. Softonic

2. Cursor IDE

• **Download**: https://www.cursor.com/downloadsCursor - The AI Code Editor+1HackerNoon+1

Cursor is an AI-powered code editor designed to enhance productivity. It's compatible with Windows, macOS, and Linux. While it's a standalone editor, you can integrate it into your workflow alongside PyCharm.

3. Firebase Studio

• Access: https://firebase.studio/

Firebase Studio is a cloud-based development environment by Google, enabling you to build full-stack AI applications directly from your browser. It integrates seamlessly with Firebase services like Firestore, Authentication, and Hosting.

4. Windsurf Plugin for PyCharm

• **Plugin Page**: https://plugins.jetbrains.com/plugin/20540-windsurf-plugin-formerly-codeium-for-python-js-java-go--

Installation Steps in PyCharm:

- 1. Open PyCharm.
- 2. Navigate to **Settings** (or **Preferences** on macOS).
- 3. Select **Plugins** from the sidebar.
- 4. Click on the **Marketplace** tab.
- 5. Search for **Windsurf**.
- 6. Click **Install** and restart PyCharm if prompted.

Windsurf, formerly known as Codeium, provides AI-driven code completion and suggestions, enhancing your coding efficiency within PyCharm.