**Step 1: Install Python**

Make sure you have Python installed on your system:

1. Go to the [Python download page](https://www.python.org/downloads/).
2. Download and install the latest version of Python for Windows.
3. During installation, check the box that says “Add Python to PATH.”

**Step 2: Install Black**

1. Open **Command Prompt** or **PowerShell**.
2. Run the following command to install Black via pip (Python’s package installer):

bash

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pip install black

This installs Black globally on your system.

**Step 3: Open Visual Studio Code**

1. Launch Visual Studio Code (VSCode).

**Step 4: Install Python Extension in VSCode**

1. Open the **Extensions** view in VSCode (shortcut: Ctrl+Shift+X).
2. Search for the “Python” extension by Microsoft and install it. This extension is required to enable Black as the formatter for Python code.

**Step 5: Configure VSCode to Use Black as the Default Formatter**

1. Go to **File** > **Preferences** > **Settings** (or press Ctrl+,).
2. In the search bar, type "Format On Save" and enable the **Editor: Format On Save** option. This will automatically format your code when you save a file.
3. Still in the settings, type **Python Formatting Provider** in the search bar.
4. Select **black** from the dropdown menu.

Alternatively, you can add this configuration directly to your **settings.json** file:

1. Press Ctrl+Shift+P and select “Preferences: Open Settings (JSON)”.
2. Add the following lines to the JSON file:

json

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{

"python.formatting.provider": "black",

"editor.formatOnSave": true

}

**Step 6: Format Your Code**

1. Open a Python file in VSCode.
2. Save the file (shortcut: Ctrl+S). Black will automatically format your code upon saving if you enabled **Format On Save**.
3. Alternatively, press Ctrl+Shift+P and select **Format Document** if you only want to format specific files manually.

Black should now be up and running in your VSCode setup on Windows!