

Install Python and Visual Studio Code (PC - Windows) — Interactive Checklist Form

Objective

This guide explains, step by step, how to install:

- Python
- Visual Studio Code (VS Code)
- The Python extension for VS Code
- A simple test program to confirm everything is working

Review Information

Name

Date

Overall Comments

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Before You Start

You need:

- A Windows PC
- Internet access
- Permission to install software

It is best to close other programs before starting.

Completed

Step 1 — Download Python

1. Open your web browser.
2. Go to <https://www.python.org/downloads/>.
3. Click the button to download the latest Python version for Windows.
4. Wait until the installer file finishes downloading.

Completed

Step 2 — Install Python

1. Open your **Downloads** folder.
2. Double-click the Python installer file.
3. On the first installation screen, **very important**, check:
☐ **Add Python to PATH**
4. After checking the box, click:
 - **Install Now**
5. Wait for the installation to finish.
6. If Windows asks for permission, click **Yes**.
7. When the installation is complete, click **Close**.

Completed

Step 3 — Verify Python Installation

1. Open **Command Prompt**.

- Click **Start**
- Type `cmd`
- Press **Enter**

2. In Command Prompt, type:

```
python --version
```

3. Press **Enter**.

You should see something similar to:

```
Python 3.x.x
```

4. Also test `pip` by typing:

```
pip --version
```

You should see a version number.

Completed

Step 4 — If python Does Not Work

If you get a message saying Python is not recognized:

1. Close Command Prompt.
2. Run the Python installer again.
3. Make sure you check:
 - ☐ **Add Python to PATH**
4. Complete the installation again.
5. Open a new Command Prompt window and test again.

Completed

Step 5 — Download Visual Studio Code

1. Open your web browser.
2. Go to <https://code.visualstudio.com/>.
3. Click **Download for Windows**.
4. Wait for the installer to download.

Completed

Step 6 — Install Visual Studio Code

1. Open the downloaded VS Code installer.
2. Click **Next** through the setup screens.
3. Accept the license agreement.
4. Continue clicking **Next** until you reach **Select Additional Tasks**.
5. It is recommended to check:
 - ☐ Add “Open with Code” action to Windows Explorer file context menu
 - ☐ Add “Open with Code” action to Windows Explorer directory context menu
 - ☐ Register Code as an editor for supported file types
 - ☐ Add to PATH
6. Click **Next**.
7. Click **Install**.
8. After installation, click **Finish**.

Completed

Step 7 — Open VS Code

1. Open **Visual Studio Code**.
2. Wait for the main screen to appear.
3. On the left side, locate the **Extensions** icon.

Completed

Step 8 — Install the Python Extension

1. Click the **Extensions** icon.
2. In the search box, type:

`Python`

3. Find **Python** by **Microsoft**.
4. Click **Install**.
5. Wait for the extension to finish installing.

Completed

Step 9 — Open a Working Folder

1. In VS Code, click **File > Open Folder**.
2. Create or choose a folder for Python work.

Example:

`C:\Users\YourName\Documents\Python-Projects`

3. Click **Select Folder**.

Completed

Step 10 — Create a Test Python File

1. In VS Code, click **File > New File**.
2. Save the file as:

`test.py`

3. Type the following code into the file:

```
print("Hello Yahya - Python is working on PC!")
```

4. Save the file.

Completed

Step 11 — Select the Python Interpreter

1. Press:

```
Ctrl + Shift + P
```

2. In the command box, type:

```
Python: Select Interpreter
```

3. Click it.
4. Choose the installed Python version.

It may look similar to:

```
Python 3.x.x 64-bit
```

Completed

Step 12 — Run the Test Program

You can run the file in either of these ways.

Option A — Run from VS Code Button

1. Open `test.py`.
2. Click the **Run** button near the top right.
3. Check the terminal output at the bottom.

Option B — Run from Terminal

1. In VS Code, click **Terminal** > **New Terminal**.
2. Type:

```
python test.py
```

3. Press **Enter**.

Expected result:

```
Hello Yahya - Python is working on PC!
```

Completed

Step 13 — Install Common Python Packages

In the VS Code terminal, type:

```
pip install pandas matplotlib numpy openpyxl
```

Press **Enter** and wait for installation to complete.

Completed

Step 14 — Check Installed Packages

To confirm installation, type:

```
pip list
```

Look for packages such as:

- pandas
- matplotlib
- numpy
- openpyxl

Completed

Step 15 — Create a Better Folder Structure

You may want a simple structure like this:

```
Python-Projects/  
  01-Test/  
  02-Scripts/  
  03-Data/  
  04-Results/
```

This helps keep your work organized.

Completed

Step 16 — Recommended Settings for Windows

Useful tips:

- Restart VS Code after installing extensions.
- Restart Command Prompt after installing Python.
- Save files with .py extension.
- Use simple folder names without special characters when starting.

Completed

Troubleshooting

Problem 1 — python not recognized

Possible reason:

- Python was not added to PATH.

Fix:

- Reinstall Python and check **Add Python to PATH**.

Problem 2 — VS Code cannot find Python interpreter

Fix:

- Press Ctrl + Shift + P
- Run Python: Select Interpreter
- Select the correct Python version

Problem 3 — pip not recognized

Fix:

- Reinstall Python
- Make sure Python and pip were installed correctly
- Open a new Command Prompt window

Problem 4 — Script runs and closes too quickly

If using Command Prompt directly, add:

```
input("Press Enter to close...")
```

at the end of your test script.

Completed

Summary

You have now completed the following:

- Installed Python on Windows
- Installed Visual Studio Code
- Installed the Python extension
- Selected the Python interpreter
- Created and ran a test Python file
- Installed common Python packages

Completed

Next Suggested Step

Your next test file can be:

```
name = input("What is your name? ")  
print("Hello", name)
```

Save it as:

```
hello.py
```

Then run it in VS Code.

Completed

Save for Review

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