
Python Tsunami

Local Installations

Visual Studio Code



- Free + Open source solution from Microsoft (there are others)
- Many programming languages
- Github integration
- Easy to install



<https://code.visualstudio.com/>

Disable telemetry if you would not like Microsoft collecting your data!

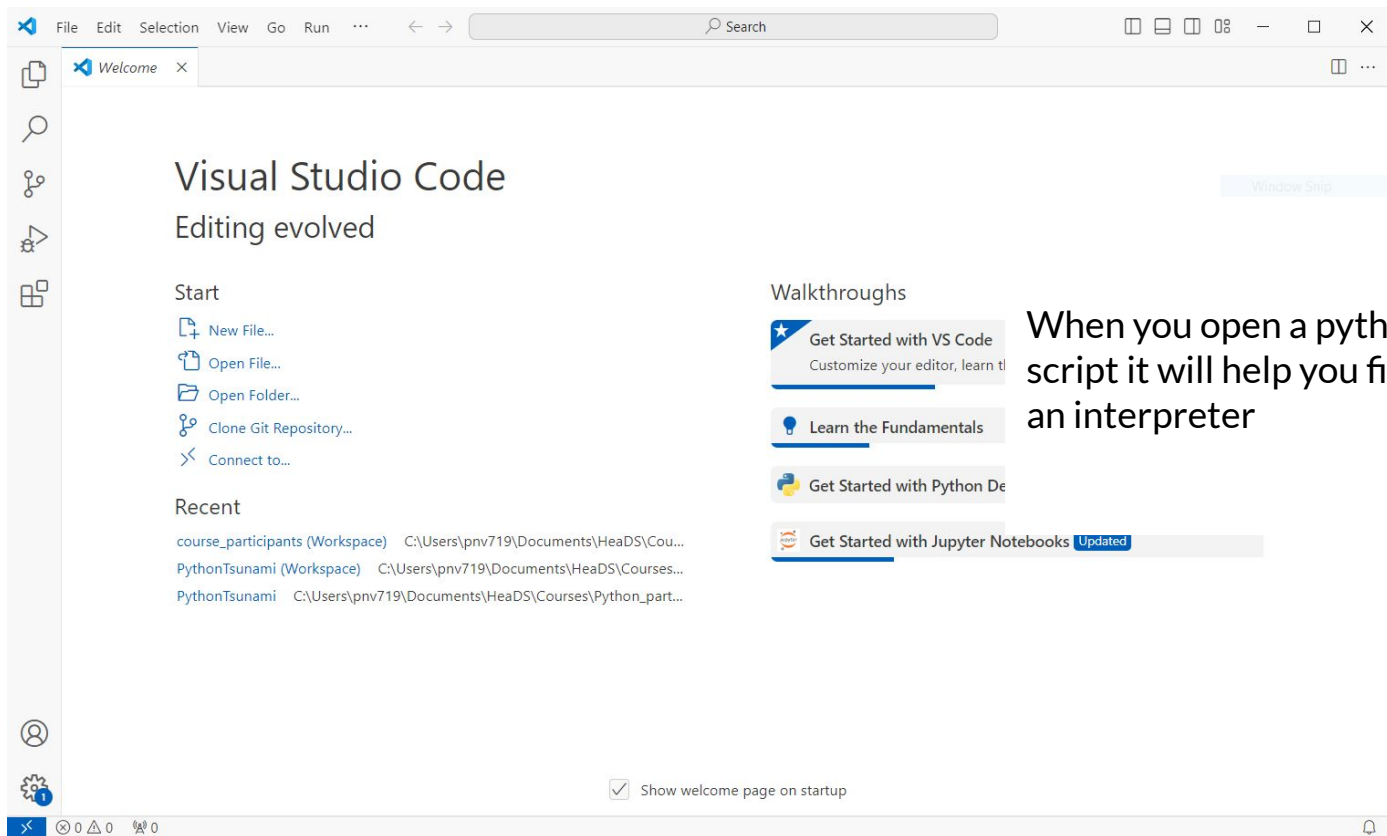
How to disable telemetry reporting

VS Code collects usage data and sends it to Microsoft to help improve our products and services. Read our [privacy statement](#) and [telemetry documentation](#) to learn more.

If you don't want to send usage data to Microsoft, you can set the `telemetry.telemetryLevel` user [setting](#) to `off`.

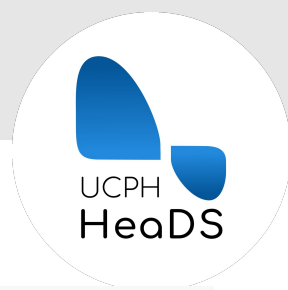
From **File > Preferences (Code > Preferences or Code > Settings on macOS) > Settings**, search for `telemetry`, and set the **Telemetry: Telemetry Level** setting to `off`. This will silence all telemetry events from VS Code going forward.

Start up



When you open a python script it will help you find an interpreter

Install python

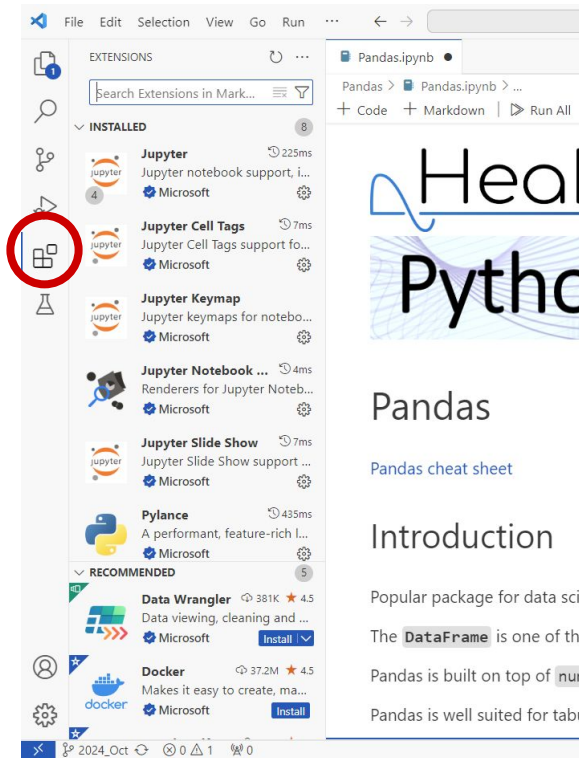


Windows: Microsoft Store or global install <https://www.python.org/downloads/windows/>

Mac: App Store or command line

Linux systems: Command line

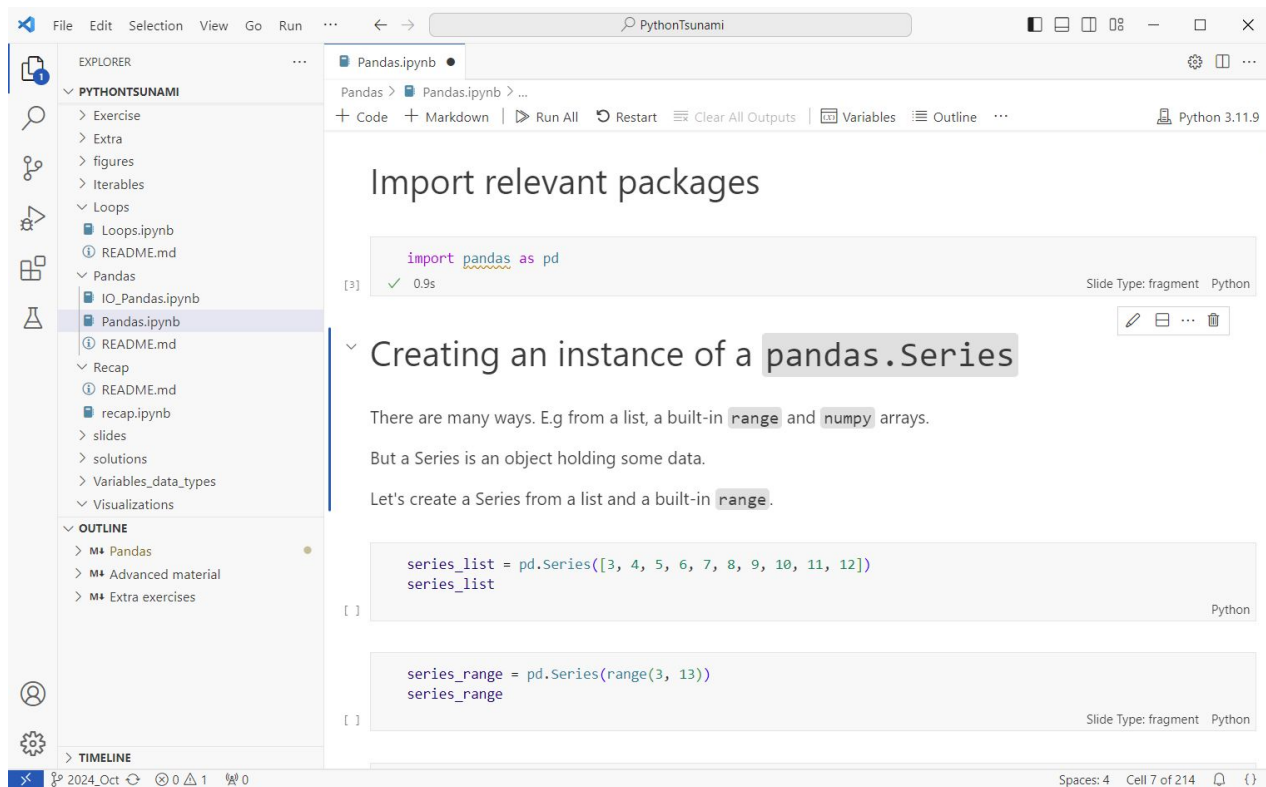
Install python



OR check 'extensions'

As you can see, I also got Jupyter ect because I opened an ipython notebook.

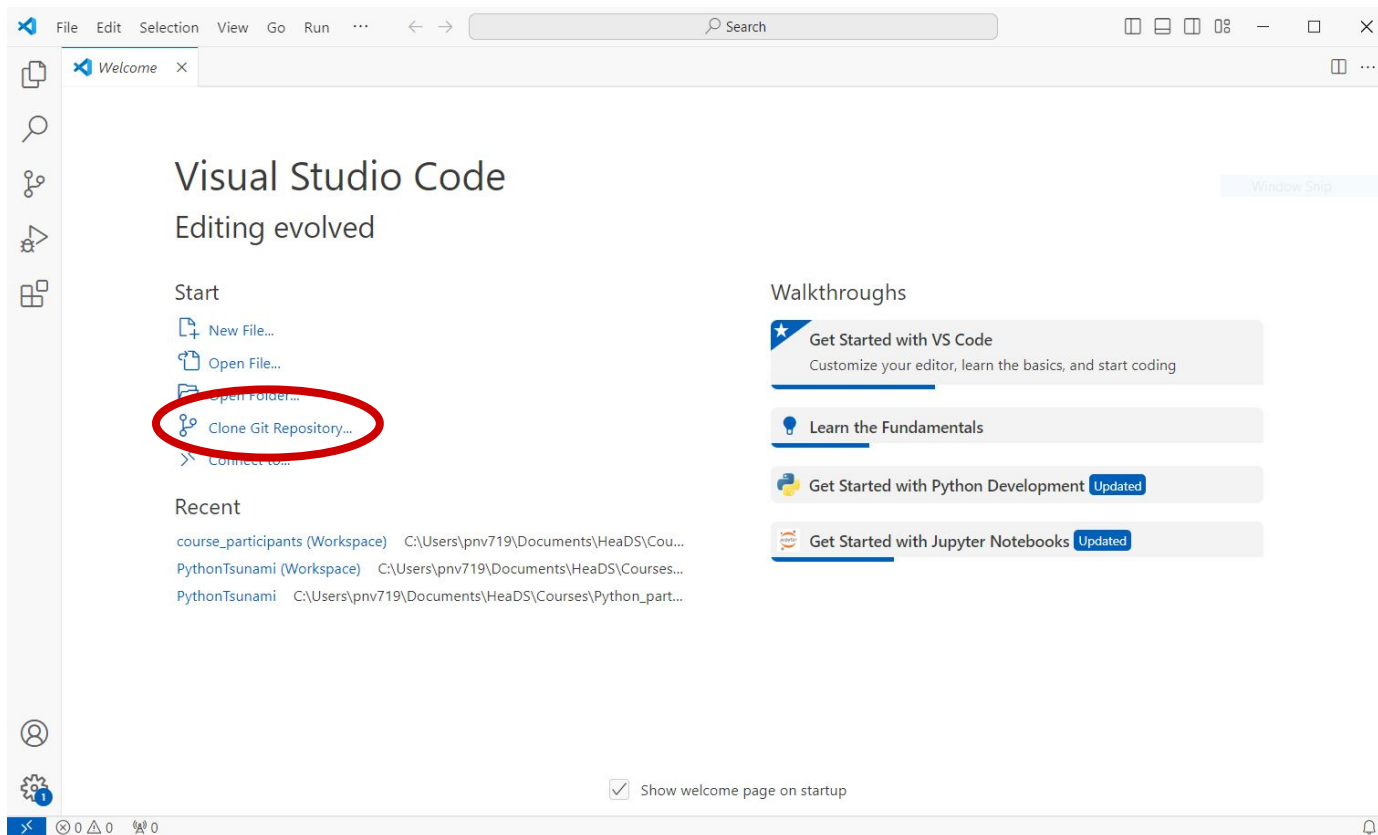
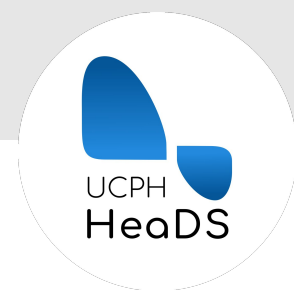
VS code can open ipython notebooks:



Operate as in colab

- Code cells and text cells
- Run cells with run button or shift+enter
- Output appears below cell

Github integration



Packages are also called libraries. They are bundles of code that contain a certain functionality.

You have already used packages:

```
import pandas as pd  
  
import plotly.express as px
```

You'll need to have a local install of the package before you can load and use it.

Installing packages



Now how do you get packages installed?

Option 1: Pip + any bash terminal

```
MINGW64/c/Users/pnv719

pnv719@SUN1022949 MINGW64 ~
$ pip install pandas
Collecting pandas
  Downloading pandas-2.2.2-cp311-cp311-win_amd64.whl.metadata (19 kB)
Collecting numpy>=1.23.2 (from pandas)
  Downloading numpy-2.1.1-cp311-cp311-win_amd64.whl.metadata (59 kB)
----- 59.7/59.7 kB 1.5 MB/s eta 0:00:00
Requirement already satisfied: python-dateutil>=2.8.2 in c:\users\pnv719\appdata\local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\lo
cal-packages\python311\site-packages (from pandas) (2.9.0.post0)
Collecting pytz=2020.1 (from pandas)
  Downloading pytz-2024.2-py2.py3-none-any.whl.metadata (22 kB)
Collecting tzdata>=2022.7 (from pandas)
  Downloading tzdata-2024.1-py2.py3-none-any.whl.metadata (1.4 kB)
Requirement already satisfied: six>=1.5 in c:\users\pnv719\appdata\local\package
s\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\local-packages\p
ython311\site-packages (from python-dateutil>=2.8.2->pandas) (1.16.0)
Downloading pandas-2.2.2-cp311-cp311-win_amd64.whl (11.6 MB)
----- 11.6/11.6 MB 13.6 MB/s eta 0:00:00
Downloading numpy-2.1.1-cp311-cp311-win_amd64.whl (12.9 MB)
----- 12.9/12.9 MB 16.4 MB/s eta 0:00:00
Downloading pytz-2024.2-py2.py3-none-any.whl (508 kB)
----- 508.0/508.0 kB 15.6 MB/s eta 0:00:00
```

(Shown Gitbash on Windows)
MacOS has native bash terminal

Option 2: Pip in powershell

```
Command Prompt

Microsoft Windows [Version 10.0.19045.4894]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pnv719>pip.exe install mechanize
Collecting mechanize
  Downloading mechanize-0.4.10-py2.py3-none-any.whl.metadata (4.3 kB)
Collecting html5lib>=0.999999999 (from mechanize)
  Downloading html5lib-1.1-py2.py3-none-any.whl.metadata (16 kB)
Requirement already satisfied: six>=1.9 in c:\users\pnv719\appdata\local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\lo
cal-packages\python311\site-packages (from html5lib>=0.999999999->mechanize) (1.16.0)
Collecting webencodings (from html5lib>=0.999999999->mechanize)
  Downloading webencodings-0.5.1-py2.py3-none-any.whl.metadata (2.1 kB)
Downloading mechanize-0.4.10-py2.py3-none-any.whl (110 kB)
----- 110.4/110.4 kB 2.1 MB/s eta 0:00:00
Downloading html5lib-1.1-py2.py3-none-any.whl (112 kB)
----- 112.2/112.2 kB 6.4 MB/s eta 0:00:00
Downloading webencodings-0.5.1-py2.py3-none-any.whl (11 kB)
Installing collected packages: webencodings, html5lib, mechanize
Successfully installed html5lib-1.1 mechanize-0.4.10 webencodings-0.5.1

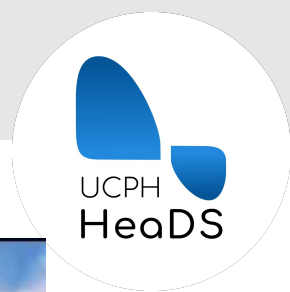
[notice] A new release of pip is available: 24.0 -> 24.2
[notice] To update, run: C:\Users\pnv719\AppData\Local\Microsoft\WindowsApps\PythonSoftwareFoundation.Python.3.11_qbz5n2kfra8p0\python.exe -m pip install --upgrade pip

C:\Users\pnv719>
```

Native Windows terminal

Some systems have pip3 instead of pip.

Dataset Exercise



I'm looking for someone to share in an adventure