Install Tools & Apps for Quick-Start Demo

These brief install notes are primarily intended to support those who attended the ‘Exploring data technologies using free tools’ session and would like to get up and running with a local SQL Server and Python setup for learning/experimenting on a Windows computer.

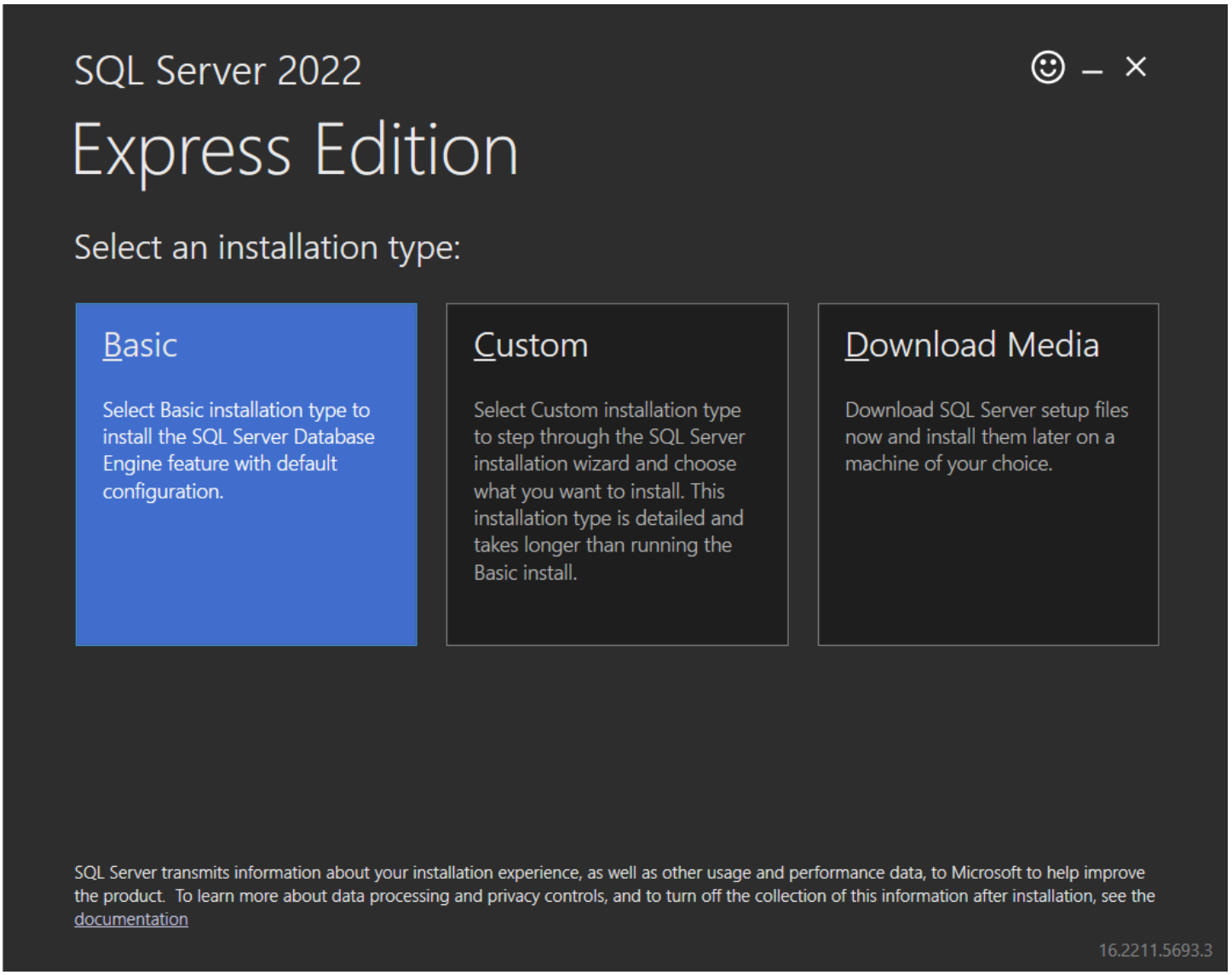
The complete set of related files can be found in the repository at:

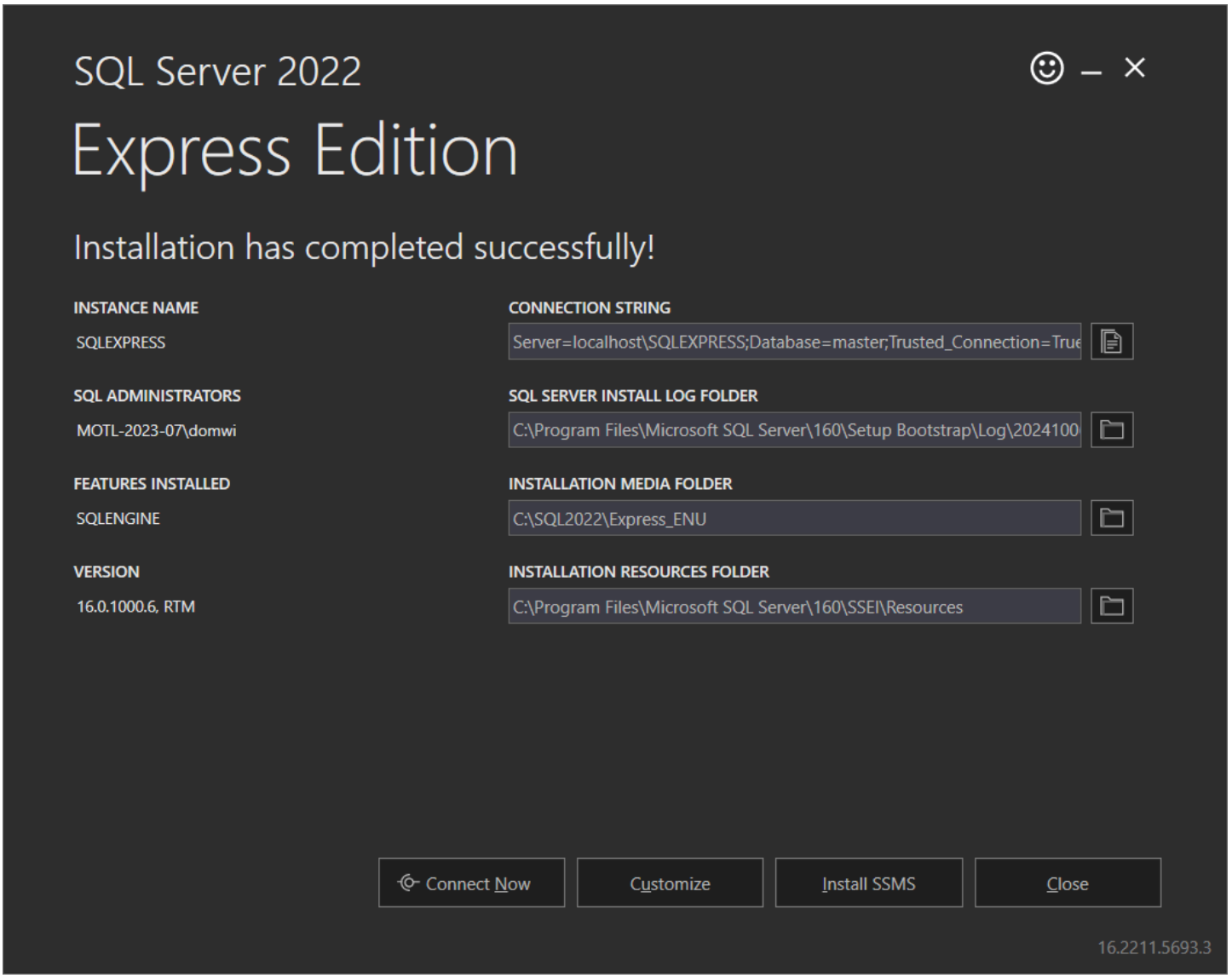
https://github.com/phil-a10/Talks/tree/main/Data%20Engineering%20Using%20Free%20Tools

SQL Server Express

Install (SQL Server Express 2022)

- https://www.microsoft.com/en-gb/sql-server/sql-server-downloads
- Basic install



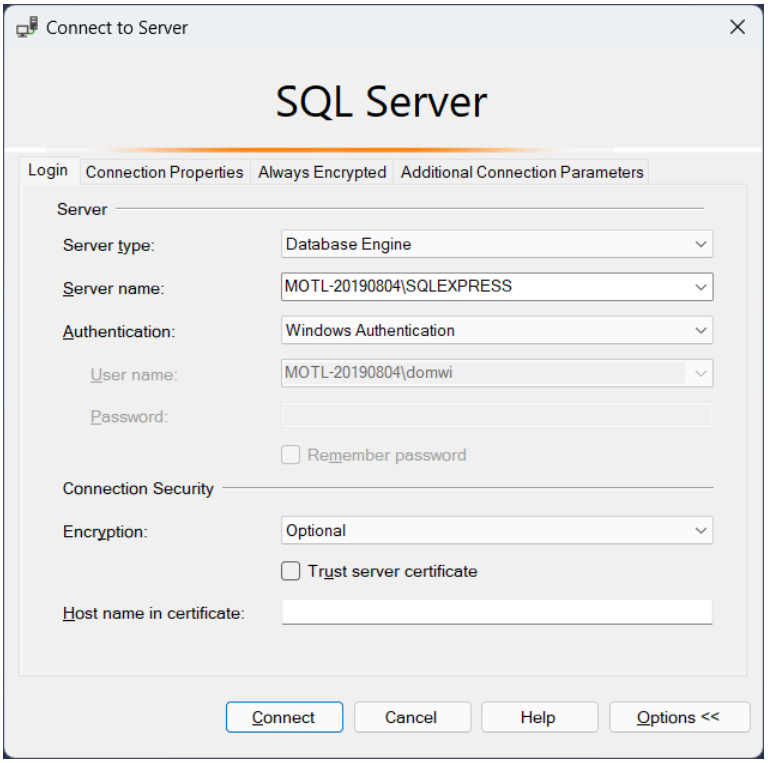


Click the ‘Install SSMS’ button on the screen above, and follow instructions to download/install

Connecting after install

After installing, when you open SQL Server Management Studio (which you'll use to access SQL Server Express and execute SQL commands), you'll be presented with a connection prompt which should be pre-populated with the Server name.

Mandatory encryption will NOT work!!! (Unless separately, your computer has been setup for this)

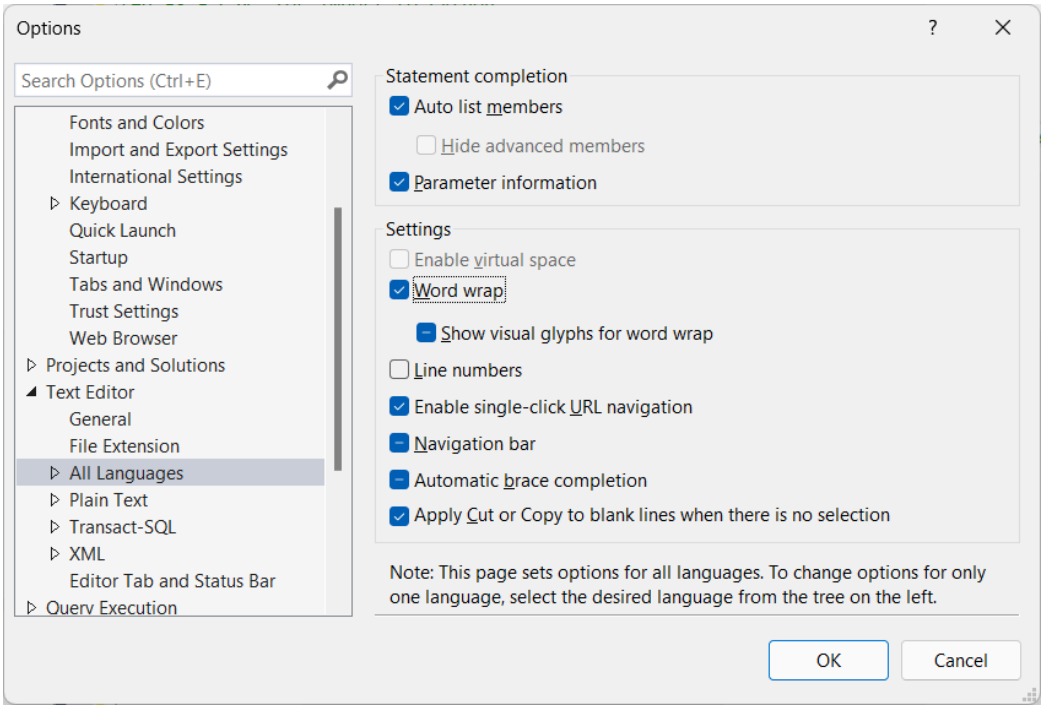


^^^Set Encryption to Optional, good to go :)

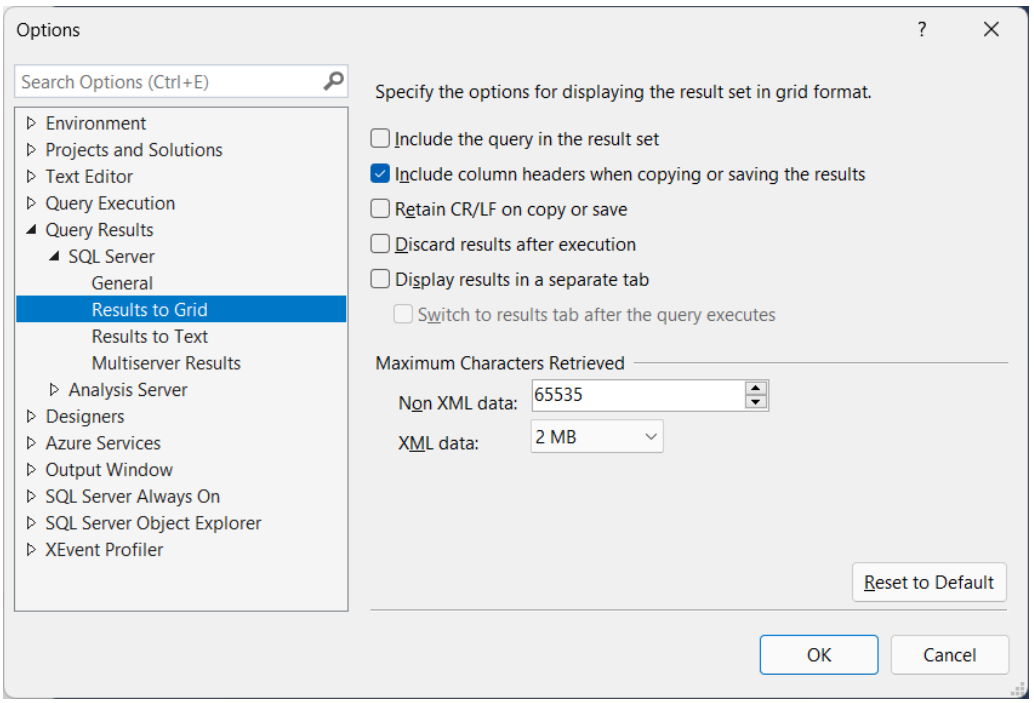
With note that lowering security by making encryption optional is not likely to be appropriate in production/work environments, the setup described here is to get up and running with fictional training data which is not sensitive/restricted access etc.

Setup tips

Tools > Options > Text Editor > All Languages > Word wrap

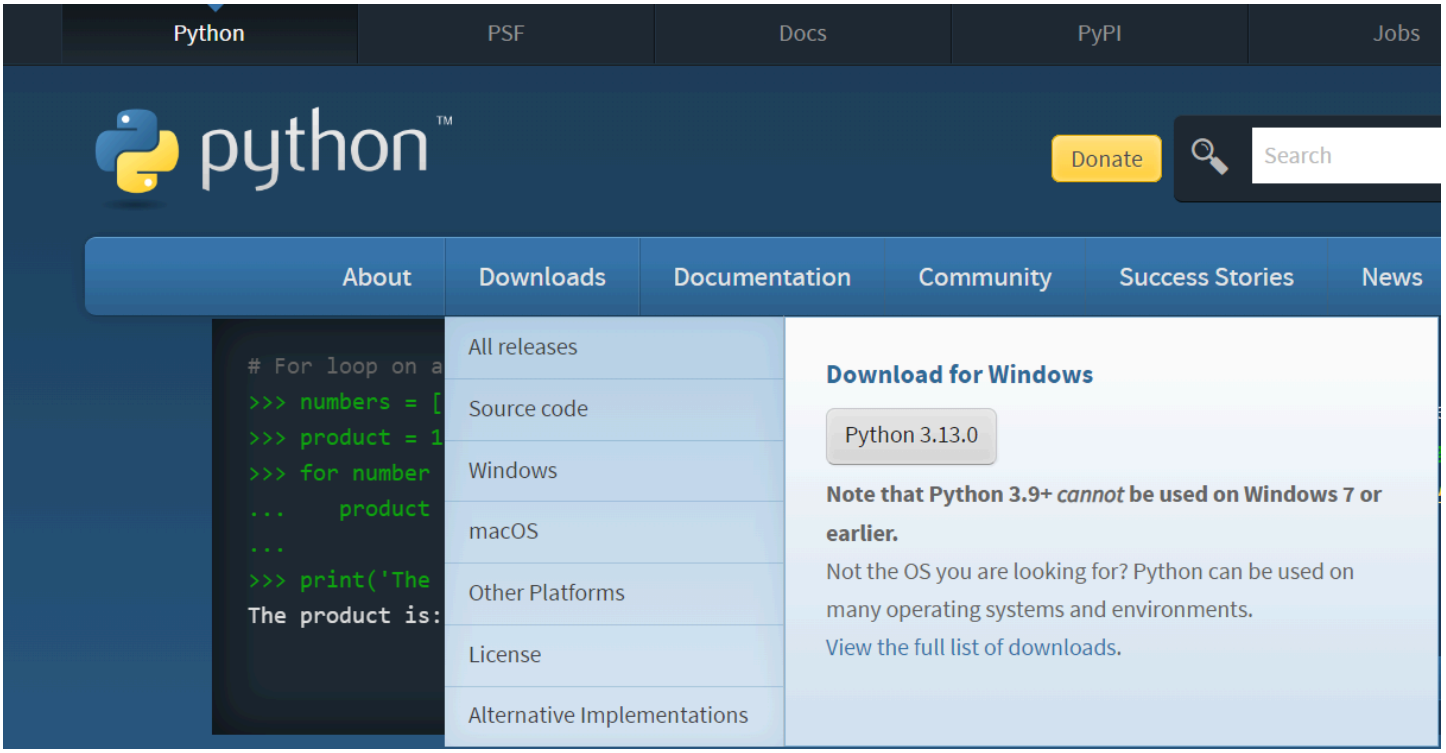


Checking ‘Include column headers when copying or saving the results’ *may* help with exporting properly formatted CSV files (unverified, spotted on tech site in passing while problem solving)

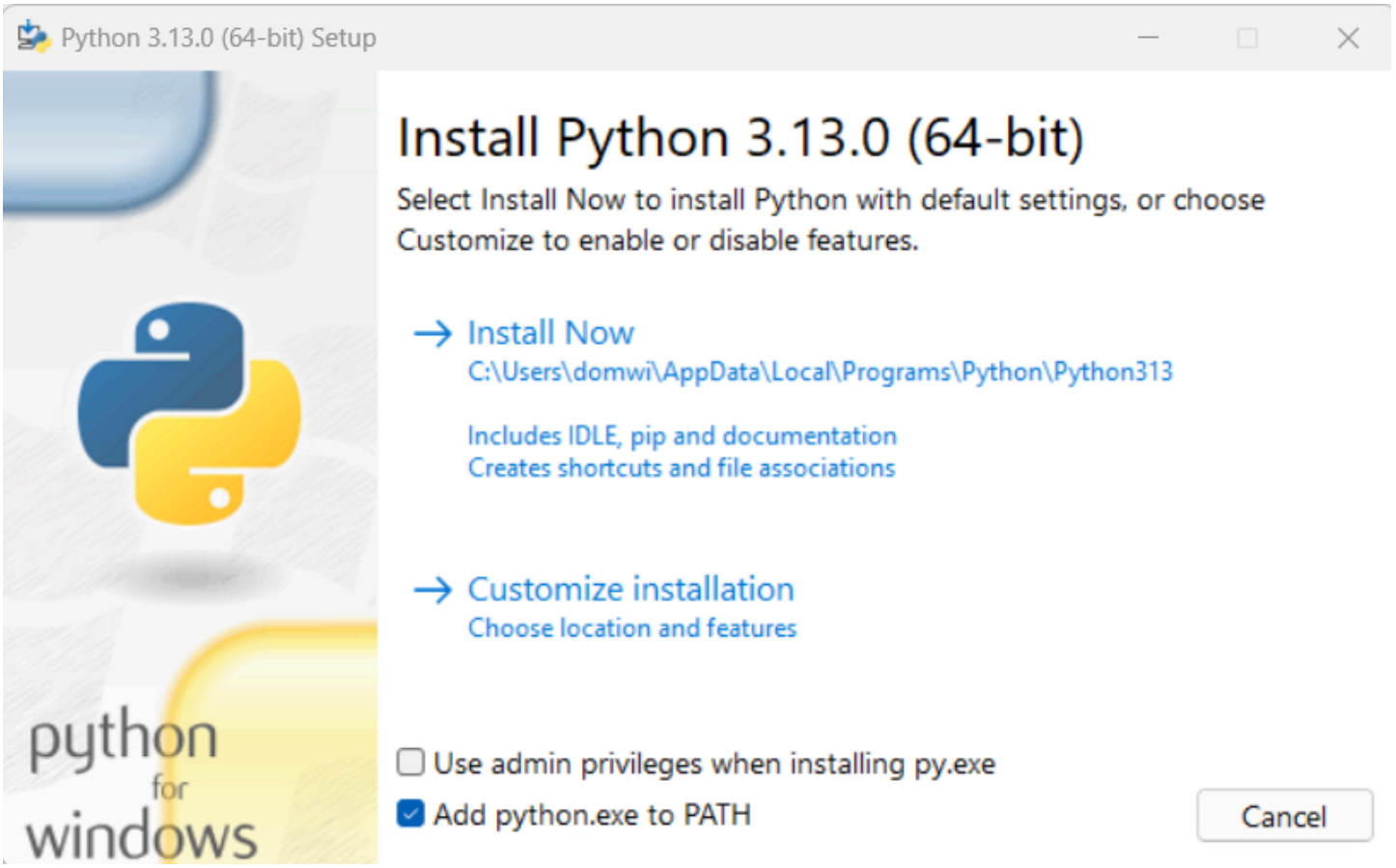


Python

- Go to python.org and download/install

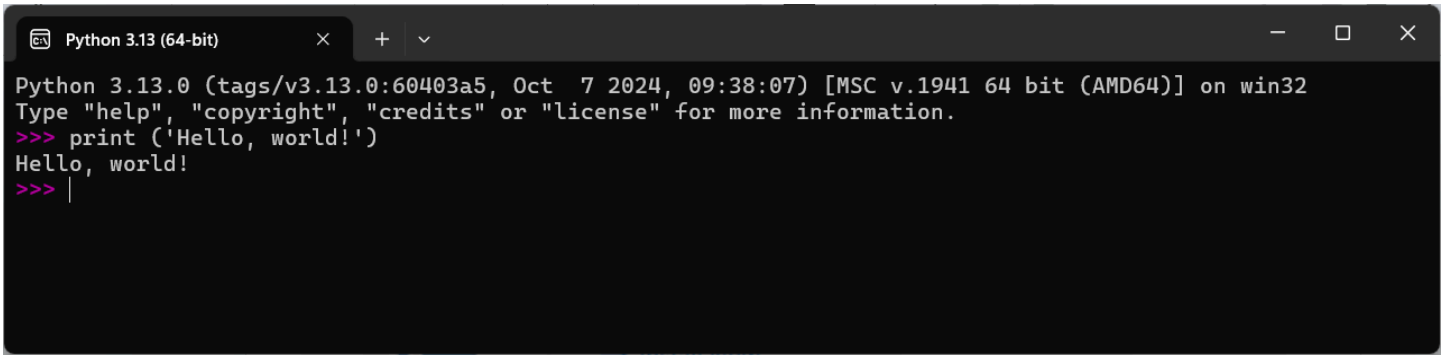


Add Python to PATH so that it's accessible from any command prompt



Check install

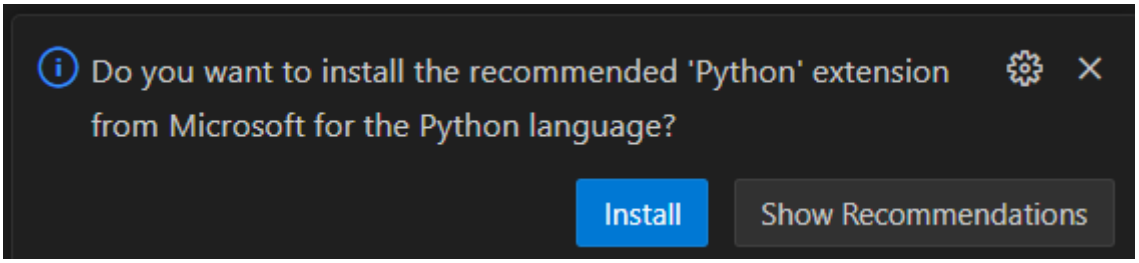
- Open a Command Prompt (search CMD from the Windows Start Menu)
- Type Python, and you should see something similar to the below with a prompt **>>>**
- Type **print(‘Hello, world!’)** and press return and it should output the text on the next line, per below:



Install Visual Studio Code

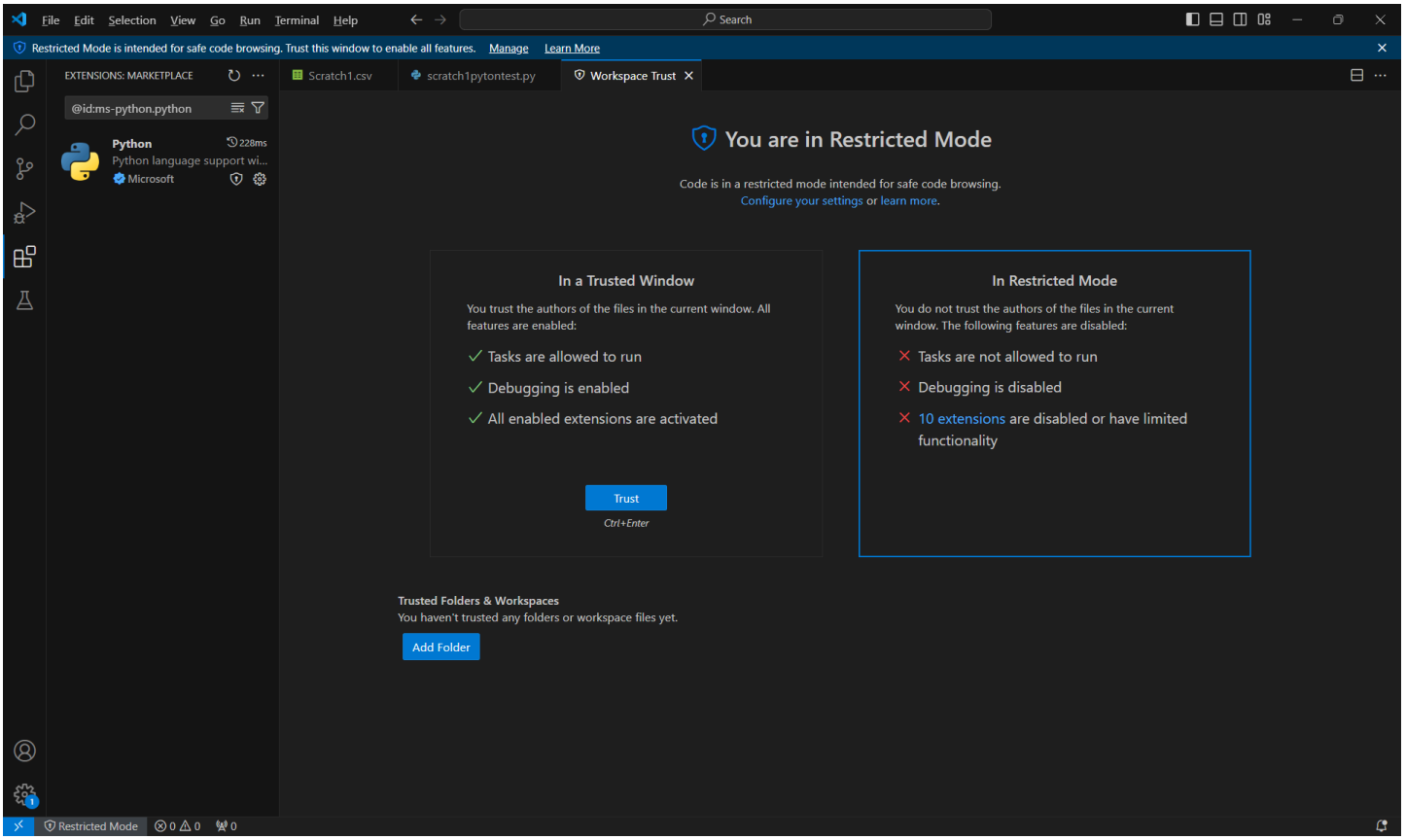
- Go to https://code.visualstudio.com/ and follow the instructions

Open VS Code, create a new file/save as python, and install the MS Python language extension (.py -should be prompted)

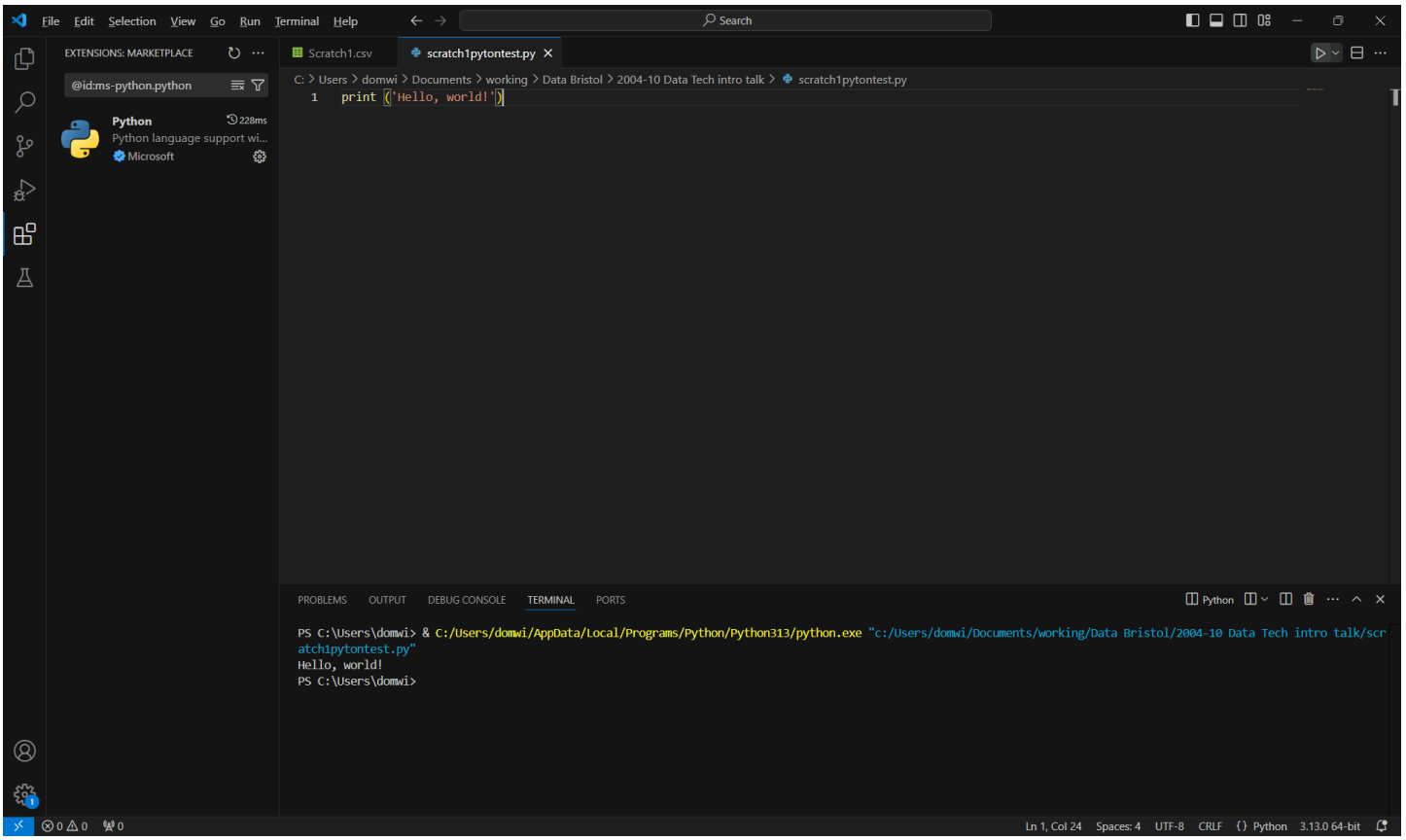


Trust the VS Code environment to get full features:

'Manage'



You should now be able to run 'Hello World'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C: > Users > domwi > Documents > working > Data Bristol > 2004-10 Data Tech intro talk > scratch1pytontest.py
1 print ('Hello, world!')
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python
PS C:\Users\domwi> & C:/Users/domwi/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/domwi/Documents/working/Data Bristol/2004-10 Data Tech intro talk/scratch1pytontest.py"
Hello, world!
PS C:\Users\domwi>
Ln 1, Col 24 Spaces: 4 UTF-8 CRLF {} Python 3.13.0 64-bit