Python Workflow Tutorial

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2 INSTALLING PYTHON

Go to the Python website and install Python 3.6.8. Then install the required packages using the pip package manager as required. Select the Python version and the web-based installer. Run the installer and make sure to select Add Python 3.6 to PATH, to be able to use Python from cmd.
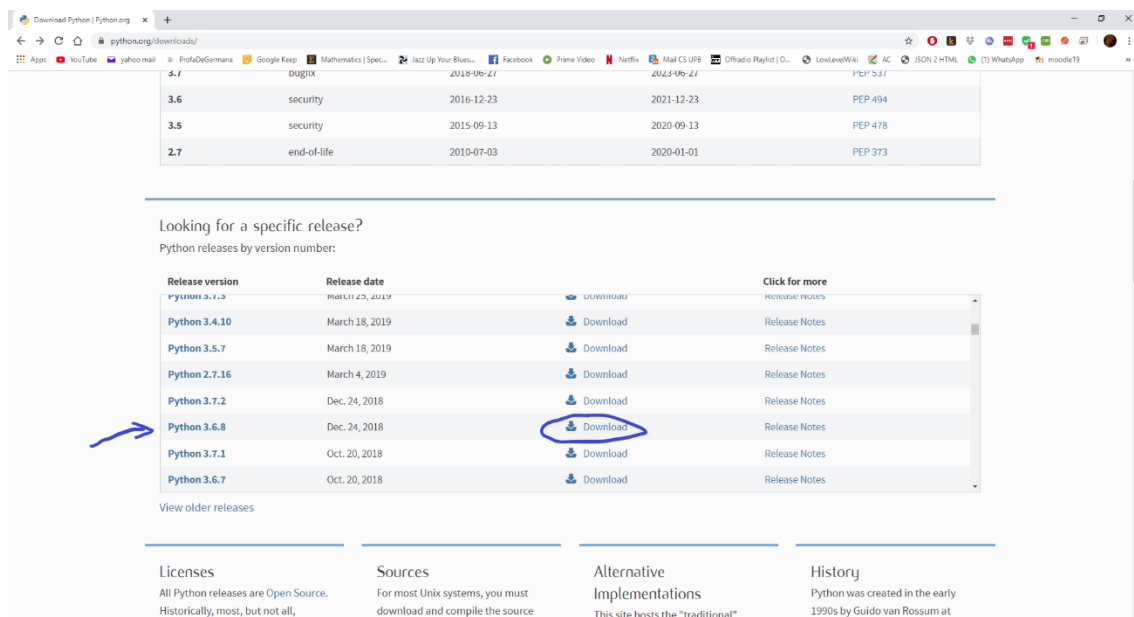

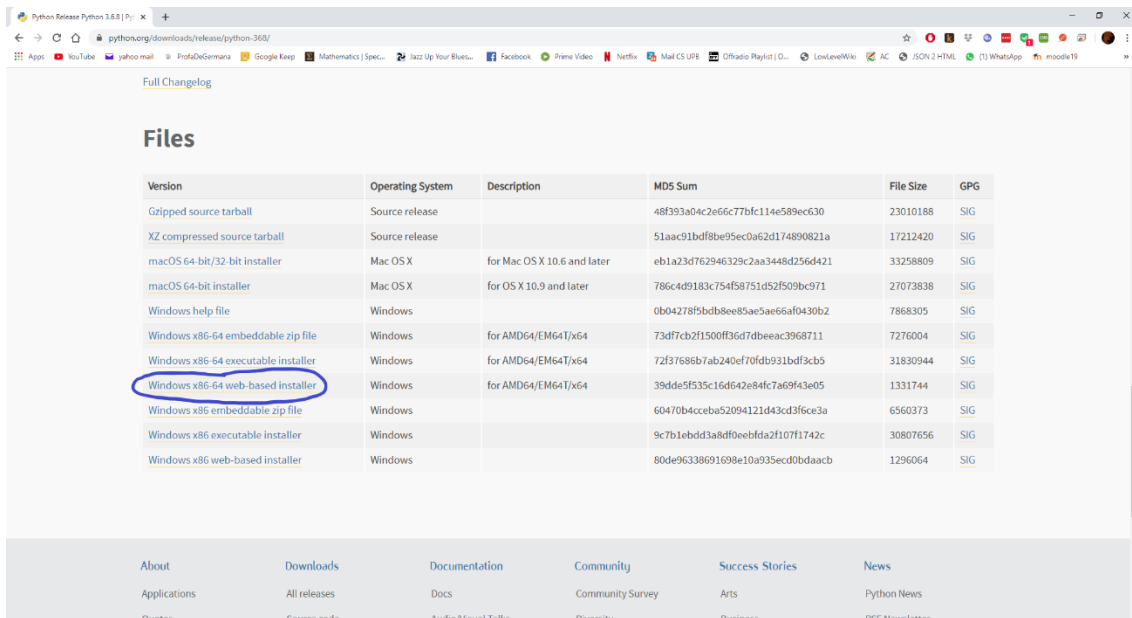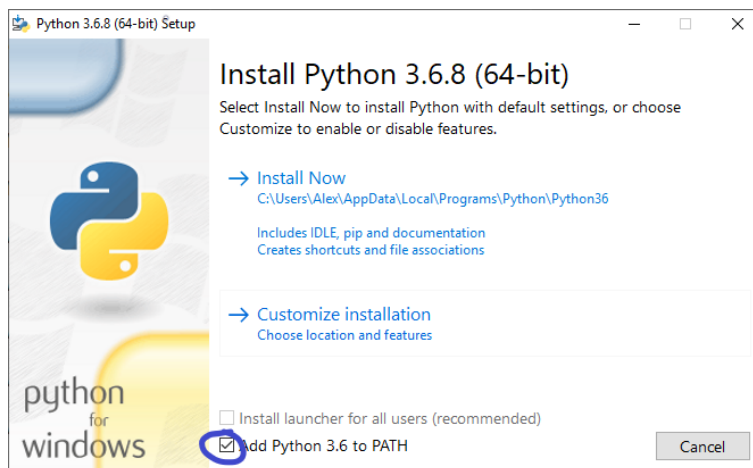Figure 1 Select Python version 3.6.8

Figure 2 Download installer

Figure 3 Make sure to select Add Python 3.6 to PATH

3   USING PLAIN OLD NOTEPAD++

You can use any text editor to write Python code. A smart editor such as Visual Studio Code (vscode) is recommended though, as it provides advanced editing capabilities through Python extensions. The workflow with vscode is described in the next section.

Notepad++ is a simple text editor that allows you to edit code, without installing additional tools. It is however limited when compared to vscode.

In Figure 4, the workflow with Notepad++ and Windows Explorer is as follows: Notepad++ is used for code editing and each file in the project has to be opened separately. The project is shown in Windows Explorer and the Python files can be seen as having the .py extension. For running Python programs (scripts), you need to open a terminal (windows cmd/PowerShell) and type in the following commands (based on the distribution and OS):

- For windows:

py -3 <python_filename>.py

- If you have multiple distributions of Python:

py -3.6.8 <python_filename>.py

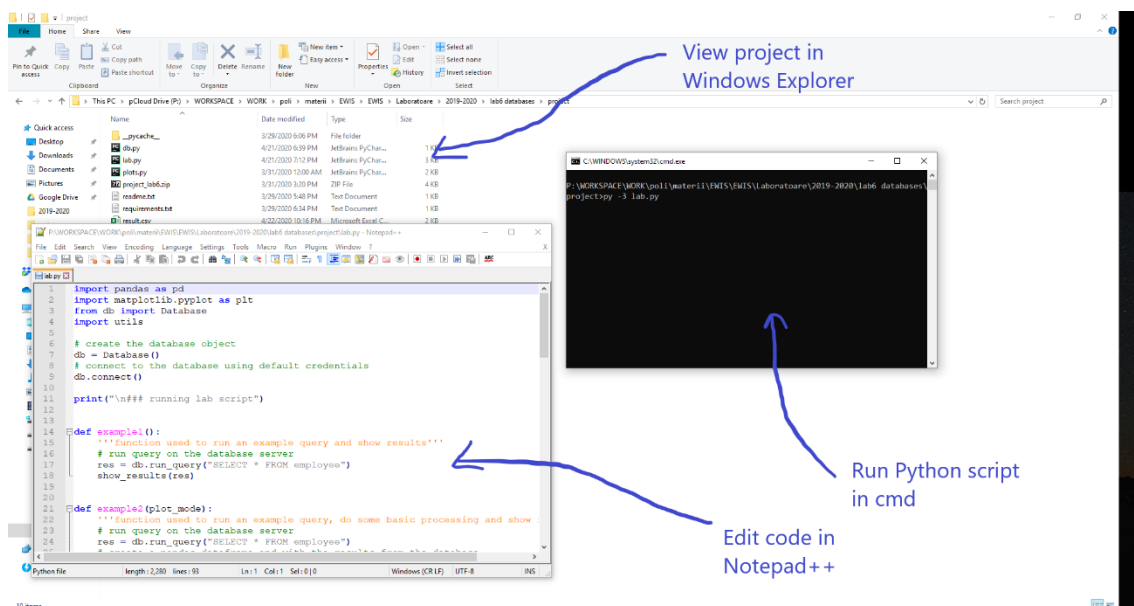- For Linux:

python3 <python_filename>.py

Figure 4 Workflow with Notepad++ and Windows Explorer

4   USING VISUAL STUDIO CODE

Visual Studio Code is a lightweight IDE (Integrated Development Environment) with support for most programming languages through extensions. It's more powerful than Notepad++ for

editing code and it allows to have the project explorer, code editor and integrated terminal (cmd/PowerShell/etc) in a single window as in Figure 5. After installing vscode, you can open files or entire folders using the Right Click > Open with Code command in the context menu.

For working with Python code, you can install the Python extension as in Figure 6. Go to View > Extensions, search for Python and select the Python extension. Install the Python extension and you are ready to code.

You can navigate through the Python files in the opened project folder and switch between opened files.

You can open a terminal as follows: Terminal > New Terminal. Then you can type in the commands to run Python programs e.g. py -3 lab.py
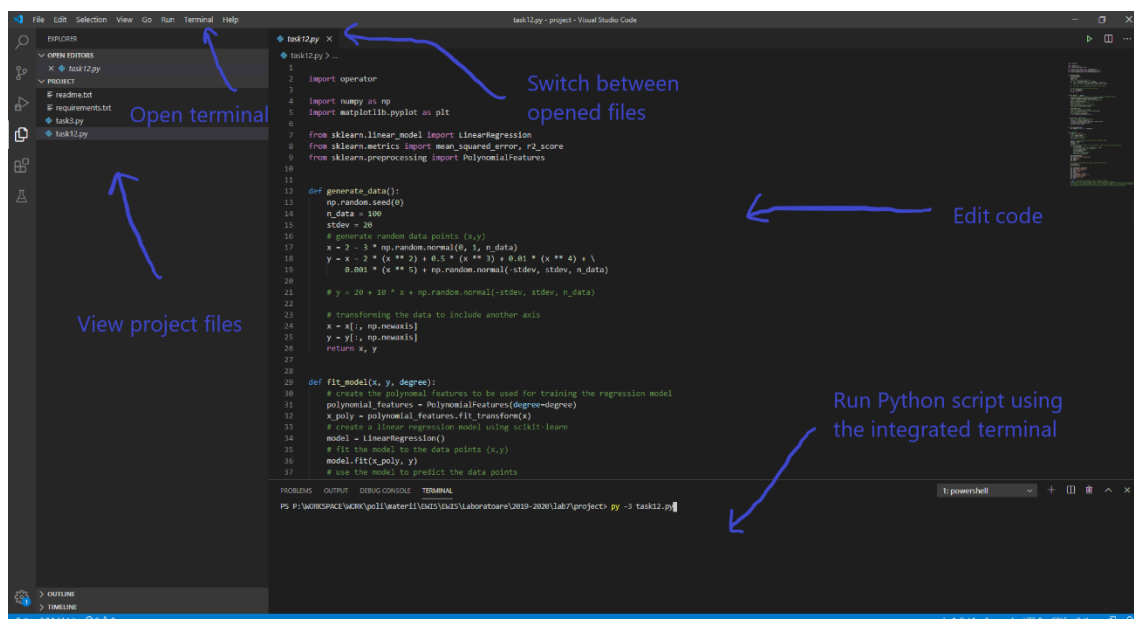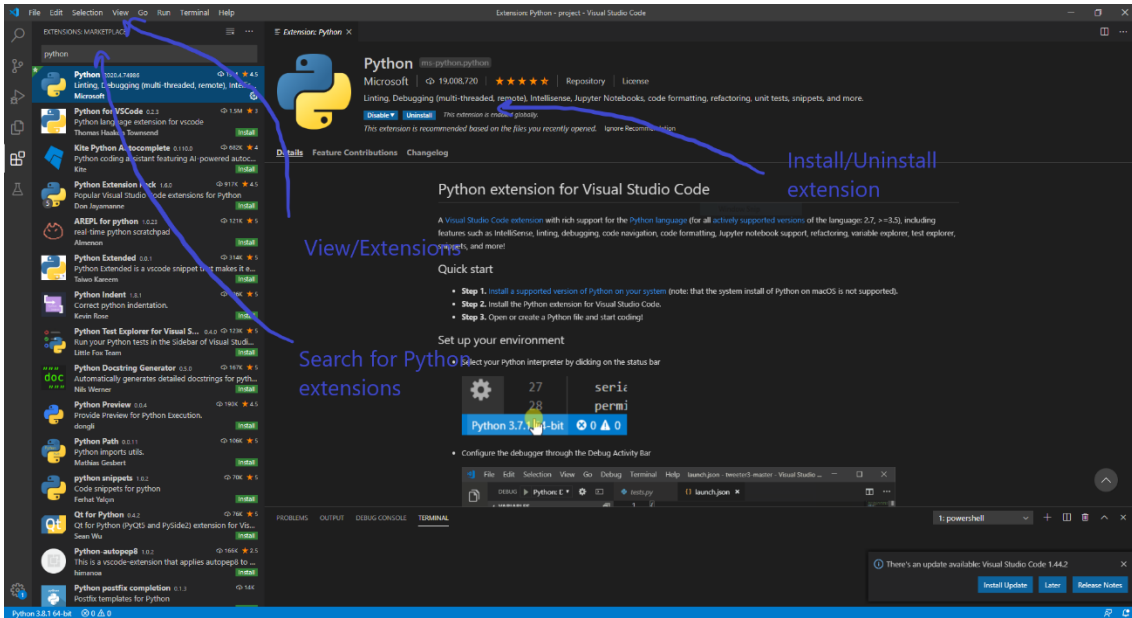

Figure 5 Using Visual Studio Code as an integrated IDE

Figure 6 Add Python extension