

Other ways to run python in Windows

The Jupyter notebook is a very nice format in that it allows markdown description, python code and programme output to be combined in a single document. PH2102/4 homework must be submitted as a Jupyter notebook.

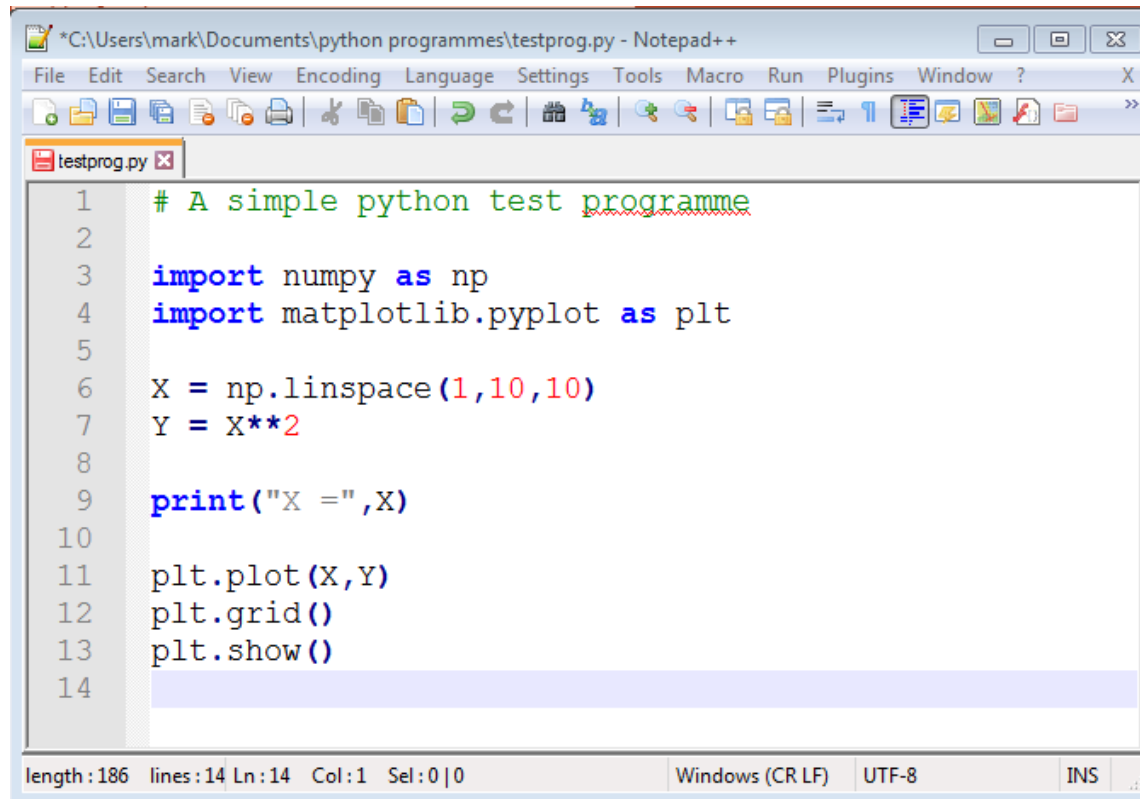
However, there are other ways of running python programmes in a Windows machine.

If not already done, install anaconda.

Here are two methods:

1. From a command line prompt
2. From an Integrated Development Environment (IDE)

Use any text editor, such as Notepad++, to write a Python programme and save it as a .py file in some folder. This is just python code, there are no markdown cells as you might find in a .ipynb notebook.

A screenshot of the Notepad++ text editor window. The title bar shows the file path: *C:\Users\mark\Documents\python programmes\testprog.py - Notepad++. The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Tools, Macro, Run, Plugins, Window, and ?. The toolbar contains various icons for file operations and editing. The editor area shows a Python script with line numbers 1 through 14 on the left. The code is: 1 # A simple python test programme, 2, 3 import numpy as np, 4 import matplotlib.pyplot as plt, 5, 6 X = np.linspace(1,10,10), 7 Y = X**2, 8, 9 print("X =",X), 10, 11 plt.plot(X,Y), 12 plt.grid(), 13 plt.show(), 14. The status bar at the bottom shows: length: 186 lines: 14 Ln: 14 Col: 1 Sel: 0 | 0, Windows (CR LF), UTF-8, and INS.

```
1 # A simple python test programme
2
3 import numpy as np
4 import matplotlib.pyplot as plt
5
6 X = np.linspace(1,10,10)
7 Y = X**2
8
9 print("X =",X)
10
11 plt.plot(X,Y)
12 plt.grid()
13 plt.show()
14
```

(1) Search for and run **Anaconda Prompt**. Use `cd` to change directory to where you have saved your `.py` file.

Type `python` followed by the `.py` filename.

```
Anaconda Prompt (Anaconda3) - python testprog.py

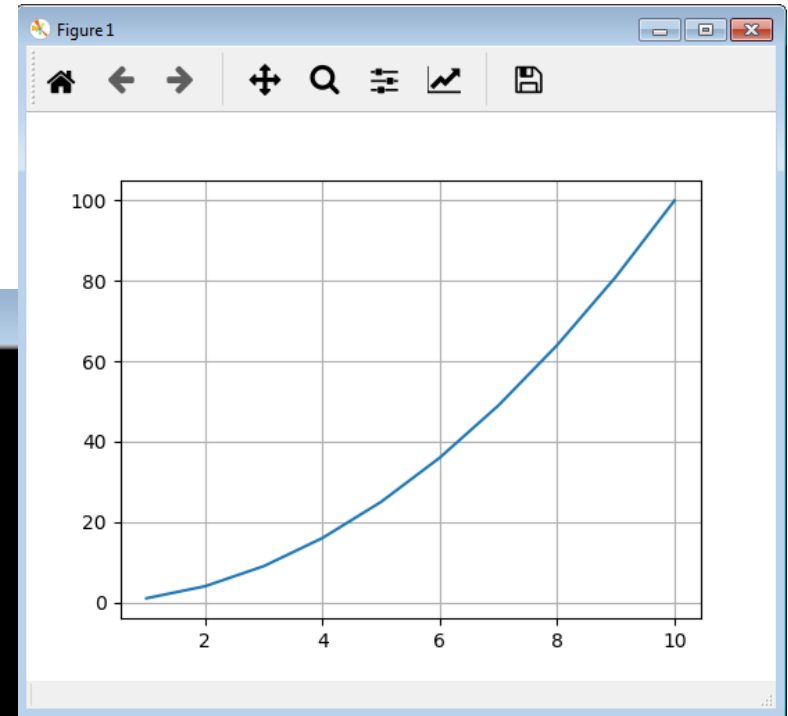
(base) C:\Users\mark>cd Documents

(base) C:\Users\mark\Documents>cd "python programmes"

(base) C:\Users\mark\Documents\python programmes>dir
Volume in drive C has no label.
Volume Serial Number is 4054-12DF

Directory of C:\Users\mark\Documents\python programmes
06/03/2020  11:32    <DIR>          .
06/03/2020  11:32    <DIR>          ..
06/03/2020  11:31                184 testprog.py
               1 File(s)                184 bytes
               2 Dir(s)  842,901,417,984 bytes free

(base) C:\Users\mark\Documents\python programmes>python testprog.py
X = [ 1.  2.  3.  4.  5.  6.  7.  8.  9. 10.]
```



(2) Search for and run **Spyder**. Use the menu options to open the .py file. Run the programme with the green play button.

