



Python Programming with Pyscripter

Pyscripter is currently one of the best free python IDEs for Windows. It does not port to Linux. To use pyscripter double-click on a pyscripter project (.psproj) or:

Start->Pyscripter

IMPORTANT: python source files can be edited using any text editor, but be careful. Python unlike other languages treats white space as significant (indentation). That is fine as long as your code contains no TAB characters, or you always use the same editor, which will view tabs in the same way. if you have problems with code containing tabs written in a different editor replace all tabs with the correct number of spaces (usually 4). This problem will never appear if you always use the same editor, e.g. pyscripter.

Pyscripter has a project mechanism that allows sets of source files to be collected together and navigated. For single file programs no project is needed, just open the file. To create and use a project:

Project creation	<u>Project-> new project</u> (rename it as required) <u>Project-> save project</u> (choose directory, e.g. same as where the files will be)
File creation	<u>File->new->new python module</u> (template code can be used or deleted) <u>File->save as-> choose name & directory</u> or copy existing files into project directory
To add created or existing files to project	Project->project explorer in explorer window: <u>Files->right click->add files</u> etc
To make file active (visible in file window)	Open it from project explorer, or using <u>File->Open</u> , or selecting a tab below files window if already open
To enter or edit python	File window will correctly indent code as needed, and highlight syntax errors automatically
To check active file python source syntax	<u>Run->check syntax</u>
To run active file:	Green triangle  will run file, output appears in python interpreter
To test python interactively (before or after running file)	Type in python interpreter. Note that functions defined in a file that has been run can be tested this way, or the last line of the file can contain tests to run defined functions automatically.
To clear python interpreter window	in window: <u>right click->clear all</u>
To debug python	Debug icon  will run file under debugger. You need this only to find bugs which require examination of local variables etc
To reindent a file correctly	Select file window. <u>Tools->tools-> check indentation</u> . If indent program crashes use <u>Edit->Undo</u> to return to original file.

Installing python on home Windows PCs

- Install 32 bit version of python 2.7.x ([latest version](#)) from www.python.org. NB v3.x is slightly incompatible with v2.7, it should not be used.
- Install 32 bit version of pyscripter: <http://code.google.com/p/pyscripter/downloads/list> (64 bit versions exist but are currently less well supported by extension libraries)