
V: Overview of the course

Gareth McCaughan

Revision 1.8, May 14, 2001

Credits

© Gareth McCaughan. All rights reserved.

This document is part of the LiveWires Python Course. You may modify and/or distribute this document as long as you comply with the LiveWires Documentation Licence: you should have received a copy of the licence when you received this document.

For the \LaTeX source of this sheet, and for more information on LiveWires and on this course, see the LiveWires web site at <http://www.livewires.org.uk/python/>

Introduction

There are a lot of worksheets in our beginners' Python course. The most important are the five numbered sheets; you should work your way through those. But they'll be pretty hard going unless you also make use of the lettered sheets, which give you useful information about particular topics.

This sheet gives a very brief description of all the sheets.

I've given each sheet a "difficulty rating": one to three stars.

- * Basic. This stuff is reasonably easy, and you'll need to know it.
- ** Intermediate. This is trickier, but it might be useful.
- *** Advanced. You don't need this to complete the course, but if you're feeling adventurous it might be interesting.

Numbered worksheets

Things to try, programs to write.

- 1 * *Introducing Python*
You should read this second (after Sheet R). It's a little tour of some of the simpler things you can do with Python.
- 2 * *Turning the Tables*
Computers are better at arithmetic than people. By the end of this sheet you'll have written a program that tests you on your tables.
- 3 ** *Pretty pictures*
An introduction to graphics in Python. This sheet also introduces the important idea of *functions*.
- 4 * *Higher! Lower!*
Writing a guessing game program. Not very hard, but there are plenty of ideas for taking it further.
- 5 ** *The Robots are Coming*
A graphical game in which you try to outwit a horde of robots.

Lettered worksheets

Important (and unimportant) topics.

- | | | | |
|----------|-----|--|---|
| A | * | <i>Lists</i> | Lists of things are important in Python. This sheet shows you some things you can do with them. |
| C | * | <i>Conditions and Conditionals</i> | How to tell the computer “Do this if so-and-so is true; otherwise, do that” |
| D | ** | <i>Dictionaries and Tuples</i> | Dictionaries and tuples: two kinds of object that aren’t covered elsewhere in the course |
| E | * | <i>Errors (also called Exceptions)</i> | Some rude messages you might get from Python, and what they mean |
| F | ** | <i>Functions</i> | An important tool for organising programs |
| G | ** | <i>Graphics</i> | More details about drawing pictures with Python |
| I | * | <i>Input and output</i> | How to make Python tell you things and ask you questions |
| J | * | <i>Jargon</i> | A guide to some technical terms. A useful sheet to have around. |
| L | * | <i>Loops</i> | How to do things over and over again. Important. |
| M | *** | <i>Modules</i> | An advanced topic: How Python manages to provide a huge number of useful functions without being too confusing. |
| O | ** | <i>Objects and classes</i> | Fairly easy. Important for the Games worksheets. |
| R | * | <i>Running Python</i> | Probably the first sheet you should read. This tells you how to get Python running on your computer, how to enter commands and write programs, etc. |
| S | * | <i>Strings</i> | What you can do with bits of text. |
| T | ** | <i>Time</i> | How to tell the time, wait for 0.3 of a second, etc. |
| V | * | <i>Overview</i> | You’re reading it. |
| W | *** | <i>The LiveWires module</i> | Which of the things you’ve done actually depend on special stuff we’ve written. |