

NEW

# The Python Book

The ultimate guide to coding with Python

Pi 2 projects inside

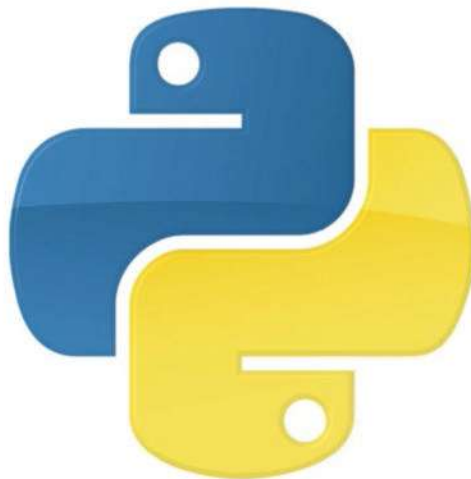


Learn to use Python • Program games • Get creative with Pi



# Welcome to The Python Book

Python is an incredibly versatile, expansive language which, due to its similarity to everyday language, is surprisingly easy to learn even for inexperienced programmers. It has seen a huge increase in popularity since the release and rise of the Raspberry Pi, for which Python is the officially recognised programming language. In The Python Book, you'll find plenty of creative projects to help you get to grips with the combination of your Raspberry Pi and Python's powerful functionality, but there are also plenty of tutorials that focus on Python's effectiveness away from the Raspberry Pi. You'll learn all about how to code with Python from the very beginning with our comprehensive masterclass, then go on to complete tutorials to consolidate your skills and become fluent in the language while also improving your computing experience. You'll learn how to make Python work for you with tutorials on coding with Django, Flask, Pygame and even more useful third-party applications and frameworks. Get ready to become a true Python expert with the wealth of information contained within these pages.





# The Python Book

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# The Python Book

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The commands you need to know

```
Python 2.7.6 (default, Mar 22 2014, 22:59:51)
[GCC 4.8.2] on linux2
Type "help", "copyright", "credits" or "lic
>>> import scipy
>>> mysin = "scipy.sin(45.6)"
>>> eval(mysin)
0.998990009074502106
>>>
```

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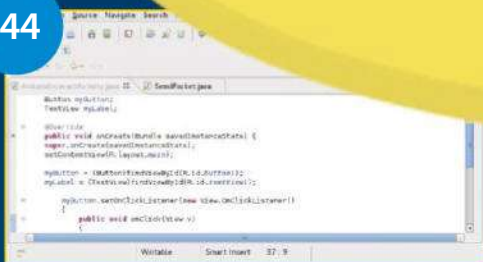
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*"Python is expansive, but you'll be an expert before you know it"*

# Get started with Python

Always wanted to have a go at programming? No more excuses, because Python is the perfect way to get started!

**P**ython is a great programming language for both beginners and experts. It is designed with code readability in mind, making it an excellent choice for beginners who are still getting used to various programming concepts.

The language is popular and has plenty of libraries available, allowing programmers to get a lot done with relatively little code.

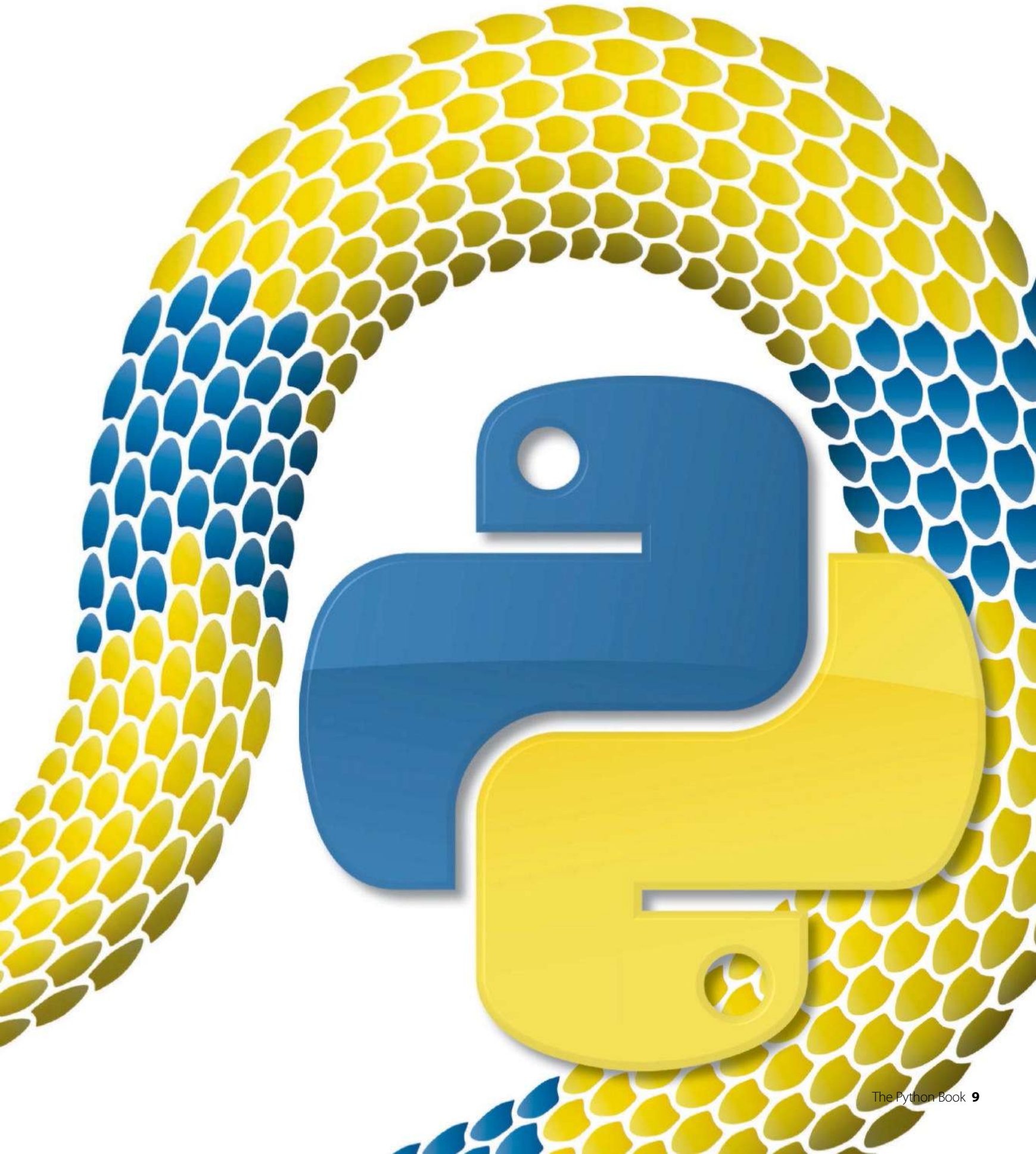
You can make all kinds of applications in Python: you could use the Pygame framework to write simple 2D games, you could use the GTK

libraries to create a windowed application, or you could try something a little more ambitious like an app such as creating one using Python's Bluetooth and Input libraries to capture the input from a USB keyboard and relay the input events to an Android phone.

For this tutorial we're going to be using Python 2.x since that is the version that is most likely to be installed on your Linux distribution.

In the following tutorials, you'll learn how to create popular games using Python programming. We'll also show you how to add sound and AI to these games.







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