Python Basic Track

LCfP Staff

September 30, 2017

Contents

Introduction

0.1 About this book

0.2 About the authors

0.2.1 Vincent Velthuizen

0.2.2 Niels Wouda

0.2.3 Nick Szirbik

0.3 Acknowledgements

Chapter 1

What it is and what it isn't

1.1 Computers

1.2 Programming

1.3 Software engineering

1.4 This course

Part I

Codecademy course

Chapter 2

Python syntax

2.1 Variables

2.1.1 Datatypes

int, float, bool

2.1.2 Duck typing

`https://en.wikipedia.org/wiki/Duck_typing`

2.2 Whitespace

2.2.1 Keep code together

2.3 Comments

2.4 Arithmetic operations

2.5 Apply these concepts

2.5.1 Tip calculator

Chapter 3

Strings & Console Output

TL;DR

- We can combine simple variables, like characters;
- into more complex ones, like strings.
-

3.1 Strings

In the previous chapter you have seen some basic data types. One of the basic types is the 'character'. As the name suggests this type of variable can represent any[1] single character. Often being able to represent a single character will not be enough. After all, characters are usually combined to form words, sentences, paragraphs, etc.

To help us do this a new type of variabel was created. It is called a because it represents a string of characters. This concept is available in most (if not all) programming language but can have slight variations. Here we will focus on how strings work in python.

To create a string we need to tell the system where the string starts and were it ends. Like in most languages you can use `"` and `'`. Since these are characters themselves we cannot just use them inside of a string. We need to 'escape' them by putting a \ in front of them. That makes \ a special character in its own right requiring it to be escaped as well. An overview of common escape sequences is given in Table 3.1.

Table 3.1: Common escape sequences

Sequence	Represents
`"\'"`	'
`"\""`	"
`"\\"`	\
`"\n"`	newline
`"\t"`	tab

[1] Clearly there is a limited 'characterset', but if you stay within the characters used in English you should be safe. More about this topic later.

3.2 Index

3.3 (String) Methods

3.4 Print

3.4.1 Concatenation

3.4.2 Explicit string conversion

3.4.3 String formatting

3.5 Apply these concepts

3.5.1 Date and Time

Chapter 4

Conditionals and Control Flow

Chapter 5

Functions

Chapter 6

Lists & Dictionaries

Index