Python Tutorial

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CONTENTS

Ι	Whetting Your Appetite	3
2	Using the Python Interpreter 2.1 Invoking the Interpreter	5 5
3	An Informal Introduction to Python 3.1 Using Python as a Calculator	9 9 16
4	More Control Flow Tools 4.1 if Statements 4.2 for Statements 4.3 The range() Function 4.4 break and continue Statements, and else Clauses on Loops 4.5 pass Statements 4.6 Defining Functions 4.7 More on Defining Functions 4.8 Intermezzo: Coding Style	19 19 20 21 22 22 24 29
5	Data Structures 5.1 More on Lists 5.2 The del statement 5.3 Tuples and Sequences 5.4 Sets 5.5 Dictionaries 5.6 Looping Techniques 5.7 More on Conditions 5.8 Comparing Sequences and Other Types	31 35 36 37 38 39 40 40
6	Modules 6.1 More on Modules 6.2 Standard Modules 6.3 The dir() Function 6.4 Packages	43 44 46 47 48
7	Input and Output 7.1 Fancier Output Formatting	53 53 57
8	Errors and Exceptions	61

Python is an easy to learn, powerful programming language. It has efficient high-level data structures and a simple but effective approach to object-oriented programming. Python's elegant syntax and dynamic typing, together with its interpreted nature, make it an ideal language for scripting and rapid application development in many areas on most platforms.

The Python interpreter and the extensive standard library are freely available in source or binary form for all major platforms from the Python Web site, https://www.python.org/, and may be freely distributed. The same site also contains distributions of and pointers to many free third party Python modules, programs and tools, and additional documentation.

The Python interpreter is easily extended with new functions and data types implemented in C or C++ (or other languages callable from C). Python is also suitable as an extension language for customizable applications.

This tutorial introduces the reader informally to the basic concepts and features of the Python language and system. It helps to have a Python interpreter handy for hands-on experience, but all examples are self-contained, so the tutorial can be read off-line as well.

For a description of standard objects and modules, see library-index. reference-index gives a more formal definition of the language. To write extensions in C or C++, read extending-index and c-api-index. There are also several books covering Python in depth.

This tutorial does not attempt to be comprehensive and cover every single feature, or even every commonly used feature. Instead, it introduces many of Python's most noteworthy features, and will give you a good idea of the language's flavor and style. After reading it, you will be able to read and write Python modules and programs, and you will be ready to learn more about the various Python library modules described in library-index.

The *Glossary* is also worth going through.

CONTENTS 1