



METADATA

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Abstract

The purpose of this book is not to teach a programming language, but to address first-year students or any reader taking their first steps in programming, without requiring any prior experience or knowledge of the subject. It thus attempts to introduce the reader to the philosophy of procedural programming and show them how to think, starting from a specific problem to be solved, until they can write code that can be translated and executed by a computer. In order for the reader to be able to put what they learn in theory into practice, but also to gain experience and practice programming, the Python programming language is used as the foundation on which we build. Python is a simple and understandable programming language with increased potential and is well suited for this purpose. It is described in the book to the extent necessary to enable it to become a language of expression for

the author and, subsequently, for the reader, and to provide the reader with a tool for practice, through which they will consolidate their understanding of programming logic. The Python language is very popular today and is gaining new friends every day. It allows programs to be developed with very few lines of code. It is used to develop applications for both research and commercial purposes and is supported by a large number of rich libraries. It also supports object-oriented programming, which allows an introductory chapter to be devoted to this topic in this book so that the reader can gain an initial insight into this philosophy. The book starts with easy problems and gradually increases in difficulty. Thus, in advanced chapters, the reader encounters search and sorting problems, mathematical problems, and even constructs simple games, such as the gallows and the mine sweeper.

