Programming Using Python

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Preface

Advances in programming languages are growing from time to time. The journey started from assembly, procedural, object oriented to functional programming languages such as Scala and Erlang. Developers often felt hard while writing the program due to the difficult syntax. Python being user specific language provide syntax very close to user.

Minimum syntax with maximum computation is the beauty of Python programming. Being supported by open source community is another great achievement with Python programming. It has very rich set of libraries designed for different purposes and advances in them continuously being added on time to time.

Specifically this book provides a comprehensive introduction to Python Programming and is designed to be accessible and useful to students, instructors, researchers and professionals. The book covers all the major topics in the field of programming including Object Oriented Concepts, Lists, Tuples, Dictionaries, Multi-Threads, Exception Handling and File Reading/Writing.

The objective is to provide the reader with a sound understanding of the foundations of programming concepts, while still covering many important advanced topics in programming. Because of this approach, the book is useful both as learning tools and as a reference. Though lots of stuffs available on the internet but there seems to be lack of contagious and conciseness.

To help the readers better understand the concepts that have been presented, we provide an extensive set of examples, figures and exercises. As a text book, this book is suitable for a wide range of students at the advanced undergraduate or graduate level. Since the students come to this subject with diverse backgrounds that may not include extensive knowledge of programming, our book requires no prerequisites- No programming knowledge is needed and we assume only a modest mathematical background. To this end, the book was designed to be as self-contained as possible.

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I (Ratnesh Prasad Srivastava), would like to express my sincere gratitude to Prof. Alaknanda Ashok, present Dean, College of Technology, G.B. Pant University of Agri. & Technology, Pantnagar for her kind support and blessings during my service as an Assistant Professor.

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