Computer Science and Informatics Practices

with

Python

for

CBSE

Class XI

SPD

Dr. Ashwin I. Mehta

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Computer Science and Informatics Practices with Python for CBSC Class XI

by Dr. Ashwin I. Mehta

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About the Book

This book will introduce CBSE class xi students to the coding skills of Python language and RDBMS operations. It is aimed at beginning computer user to learn first computer programming language as Python. If students have some previous programming experience in any formal computer language, his skill set will be enhanced further.

The book is introduction to all topics of the syllabus, taking small steps from the basics to more involved and varied topics. I have mixed tutorials, guide, Q&A, cookbook and pocket reference styles to explain new terms and ideas. I have also taken care that not too many new concepts are introduced at once.

In our examination system, often definitions of basic terms are asked. Most exam oriented definitions have been given in bold letters. Many topics where students are expected to answer pointwise, explanations have been given with bullets.

All codes, given here, have been run and successful output have been checked. Some selected examples have been presented with screen shot, which should give students confidence of running these programs on their own. Even though this is an introduction, I include some topics that might seem advanced. For example, NoSQL databases, and variable length arguments (tuple) in Python. These topics have been included because they can solve some problems in easier way.

Theoretical concept of computer architecture, scales of data, and cloud, with cyber laws and ethical online behavior are discussed.

This book is for students, teachers, and professionals for computing language and RDBMS. The book does not require previous knowledge of any computing language except some mathematical skills are essential.

The book has been divided in to four separate units as the syllabus. This will help to prepare for examinations.

About the Author

Dr. Ashwin I. Mehta is M.Sc. from University of Mumbai and Ph.D. from Bhabha Atomic Research Centre in the Nuclear Physics Division (BARC) under the guidance of late Dr. N. Satyamurthy and Dr. K. Usha Dennis. His earliest encounter with computers was writing programs in FORTRAN with BESM-6 mainframe machine and later PDP-11. Subsequently he joined Halliburton and was involved in various technologies of data acquisition, storing and interpretation of oil field data. At Halliburton, he worked in Kuwait, Italy, United States of America and many other countries across the globe. He has several research papers to his credit in national and international journals. After leaving behind a hectic lifestyle in the oil field, he entered Information Technology (I.T.) academics. Since then, his interests include programming languages, web technologies, design architecture, big data and Python. He has 20+ years of experience that includes corporate training in Halliburton as well as in different academic institutions. He has authored a number of books including "Data Warehousing for beginners", "Web Technologics" and "Advanced Java" published by Shroff Publishers and Distributors Pvt. Ltd. and "Python Programming" published by Himalaya Publications. Dr. Mehta can be contacted at mehtaashwin2007@yahoo.com for your valuable comments and suggestions.

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