



Data Structure Using C

Anil K Ahlawat

2019	7 x 9.5	416 pp	Paperback	ISBN: 9789386768384	Price: 395.00
------	---------	--------	-----------	------------------------	---------------

About the Book

Data Structure has the importance not only in Computer Science but for any discipline of Engineering and Technology where there is a requirement of appropriate data structures in program development.

Before solving a problem, a major decision is taken about which data structure will be used to represent the data. In this book, multiple stacks and multiple queues are added to represent more complex data structures.

This book broadly deals with:

data structure, the basic operations and types of data structure
 single and multidimensional arrays and sparse matrices
 concepts, types, and implementation of linked list
 concepts of stacks, recursion and queue, their operations and applications and types
 circular, priority and double ended queues
 concepts of tree and binary search tree
 basic as well as advanced topics of tree
 basic terminology and representation of graph, shortest path algorithm
 sorting and searching algorithms and complexity of these algorithms
 file organization and different types of files

Salient Features

Concise presentation of data structures with solved and programming problems

How to write an algorithm and its implementation in C++

A set of questions with answers are for interviews.

Sufficient number of problems and questions.

Table of Contents

1. Introduction
2. Array
3. Linked List
4. Stack and Recursion
5. Queue
6. Tree
7. Binary Search Tree
8. Graph
9. Sorting
10. Searching and Hashing
11. File

Interview Question with Answers
 Important Question
 Index

About the Author

Anil K Ahlawat :- is currently working with KIET Group of Institutions as Professor & Dean Academics. His clear vision to make the work place

as a centre of excellence in R&D motivates the human resource of the institution for best productivity. He is a Gold Medallist in M.Phil from IIT Roorkee, M.Tech in Computer Science & Engineering from Kurukshetra University and Ph.D. from Guru Gobind Singh Indraprastha University, New Delhi in 2009.

He has guided 7 Ph.D, 16 M.Tech students and a number of U.G projects. Currently he is supervising 8 Ph.D students. He has more than 20 years of working experience in which he has been delivered his services to AKGEC, BPIT, Amity University, ASET Delhi. He has also been working in a corporate sector as a Software Engineer. He has delivered several lectures for students and faculty in Faculty Development Programmes, Seminars, National and International conferences conducted by different Institutions/Universities in India. He is a member of IEEE, IETE, IAENG, CSTA, IACSIT, various International Conference Committee of India, France and U.K, IJCSIS, IJCA, IJEE, IJCTE, ITHEA Bulgaria etc. He has published four books and more than 80 Research papers in International & National Journals/Conferences. He has performed various roles & responsibilities successfully as a Coordinator (IQAC, NAAC, NBA, Virtual Lab, NMEICT workshop, NPTEL) Chairman of Research council, Centre Superintendent, Head Examiner, HOD, Chief Editor, Subject coordinator, expert member in selection committees and Flying Squad Member. His achievements are added some more glitters to the institutional prestige for instance he honored PRSG member of Virtual lab (IIT Delhi) by MHRD. His present research interests include Machine Learning, Artificial Neural Networks, Artificial Intelligence and Algorithm Design.