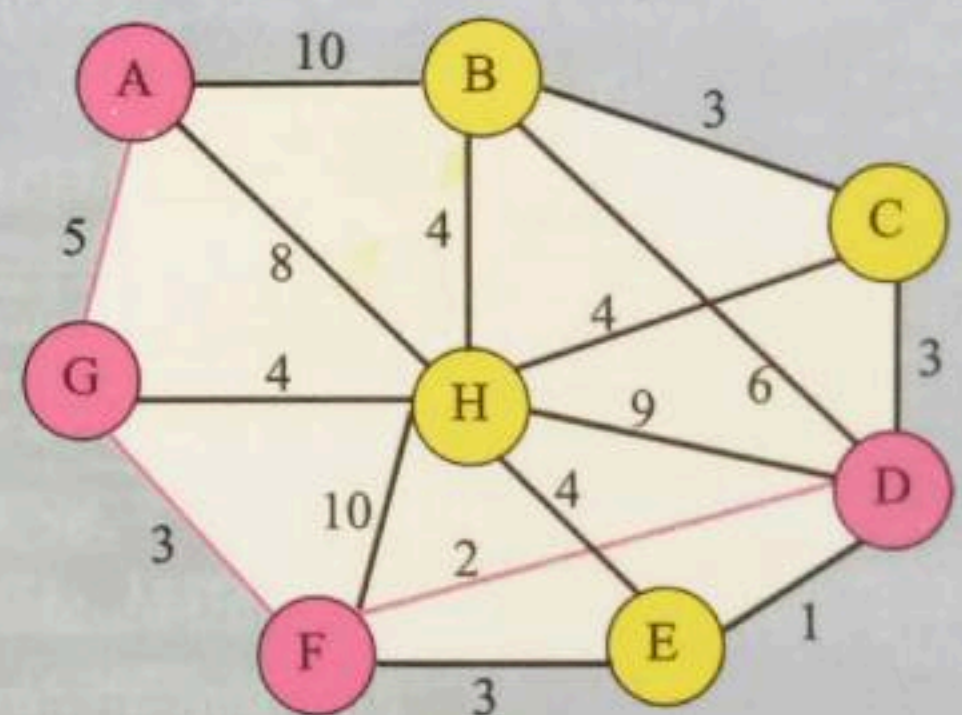
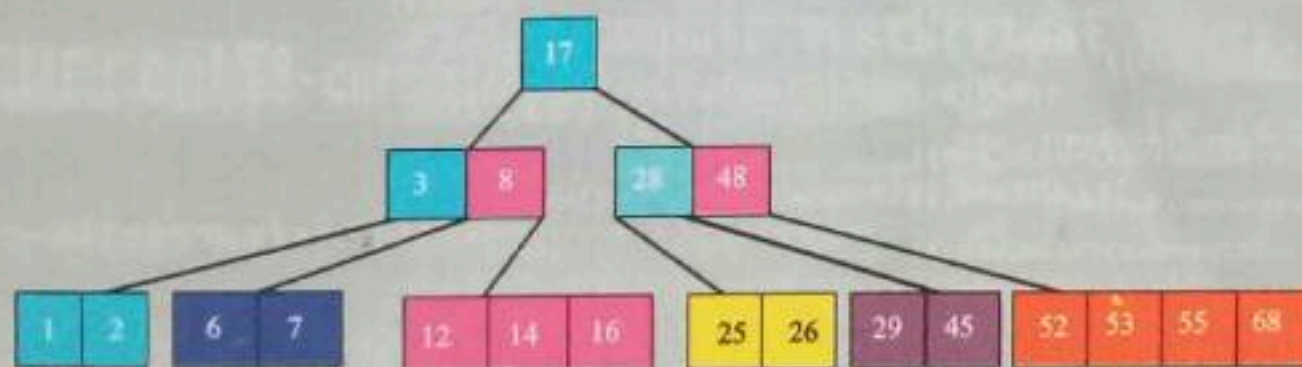


Based on Syllabus of Bachelor's Degree in Computer
Engineering (B.E.) TU, KU, POU, PU and B.Sc. CSIT

DATA STRUCTURE & ALGORITHM

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```
IsFull ( ) :  
    If TOS > S_size - 1 then  
        return 1  
    else  
        return 0  
  
Push ( ) :  
    If (IsFull ( )) then  
        Print Stack is full message  
    else  
        TOS  $\leftarrow$  TOS + 1  
        S [TOS]  $\leftarrow$  data
```



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The complete Reference

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PREFACE

I have used my ten-year experience to complete this book. It gives me great pleasure in presenting the First edition of this book to my esteemed readers. **Data Structure and Algorithm : The Complete Reference**, is a unique book useful for all readers from beginners to advanced users. It is designed to provide all essential information you will need to learn Data Structure. Data Structure and Algorithm is the core subject for undergraduate students for *Bachelor's Degree in Computer Engineering*, *Bachelor of Science in Computer Science and Information Technology (BSc.CSIT)*, *Bachelor of Computer Application (BCA)*, *Bachelor of Engineering in Information Technology (BE IT)*, *Bachelor of Computer Information System (BCIS)*, *Bachelor of Information Technology (BIT)* and *Bachelor of Engineering in Software Engineering (BE SE)*. This book is significantly different from other books in various ways. Some of the most striking features are as follows:

- Each chapter is designed in a systematic and pragmatic way.
- Each chapter mainly focuses on Algorithm and Examples.
- Simple, Unambiguous and Complete languages.
- Chapters are arranged according to most of the syllabus defined.
- More pragmatic approach for writing algorithm

I express my sincere gratitude to my colleagues, faculties of different engineering colleges who constantly encouraged me to publish this book to address the demand of IT students.

Despite all efforts, some errors might be there. I shall be grateful to the readers if the same are brought to my notice. Suggestions and comments for future improvements of the book will be gratefully acknowledged.

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CONTENTS

1. Introduction to Data Structure and Algorithm

- 1.1 Introduction to Data Structure
- 1.2 Introduction to abstract Data Types (ADT)
- 1.3 Data Structure Operations
- 1.4 Type of Data Structure
- 1.5 Comparison between Data Structure and ADT
- Questions

2. Stack and Queue

- 2.1 Introduction to Stack
- 2.2 Static Implementation of Stack
- 2.3 Conversion of Mathematical Expression Using Stack
- 2.4 Matching of Nested Parenthesis
- 2.5 Stack application
- 2.6 Introduction to Queue
- 2.7 Static implementation of queue
- 2.8 Application of queue
- 2.9 Comparison between Stack and Queue
- Questions

3. List

- 3.1 Introduction to list
- 3.2 Static implementation
- 3.3 Representation of multidimensional Array
- Questions

4. Linked List

- 4.1 Introduction to Linked List
- 4.2 Implementation of linked list
- 4.4 Linked Stack
- 4.5 Linked Queue
- 4.6 Representing Polynomials Using Linked List
- Questions

5. Recursion

- 5.1 Introduction to Recursion
- 5.2 Principles of Recursion
- 5.3 Type of Recursion

- 5.4 Comparision between Recursion and Iteration
- 5.5 Tracing Recursive Methods (Box trace)
- 5.6 Tail Recursion
- 5.7 Fabonacci sequance
- 5.8 Tower of Hanoi

6. Tree

- 6.1 Tree Terminologies
- 6.2 Binary Tree
- 6.3 Binary Search Tree (BST)
- 6.4 Binary Search Tree Traversal
- 6.5 AVL Tree
- 6.6 Binary Expression Tree
- 6.7 B-Tree 155
- 6.8 Red-Black Tree
- 6.9 Huffman coding
- Questions

7. Sorting

- 7.1 Introduction
- 7.2 Selection Sort
- 7.3 Insertion Sort
- 7.4 Bubble Sort
- 7.5 Merge Sort
- 7.6 Quick Sort
- 7.7 Radix Sort
- 7.8 Heap and Heap Sort
- 7.9 Shell sort
- Questions

8. Searching

- 8.1 Introduction
- 8.2 Sequential searching
- 8.3 Binary Search
- 8.4 Hashing
- 8.5 Collision
- Questions

9. Growth Functions

- 9.1 Introduction to Asymptotic Notations
- 9.2 Big-oh Notation
- 9.3 Omega Notation (Ω)
- 9.4 Theta Notation (Θ)

- 9.5 Upper bound "little oh" : 0
Questions

10. Graph

- 10.1 Introduction
- 10.2 Graph Terminology
- 10.3 Graph Representations
- 10.4 Incidence Matrices
- 10.5 Transitive closure
- 10.6 Warshall's Algorithm
- 10.7 Spanning tree
- 10.8 Shortest Path Problem
- 10.9 Graph Traversal
- 10.10 Topological Sort
- 10.11 Applications of Graph
Questions

Annex

Reference