

Introduction to Programming and Data Structures

Data Structures - Basics

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Basics

A data structure is a logical organization of data

- A data structure can accommodate one or more data elements (storage).
- The logical organization defines
 - how the elements will get added (insertion)?
 - how the elements will get removed (deletion)?
 - how the elements will be browsed (traversal)?

Types of Data Structures

- Linear
 - Stack
 - Queue
 - Linked List
- Nonlinear
 - Tree
 - Graph

Problems

- 1 Can nonlinear data structures be represented pursuing a linear organization?