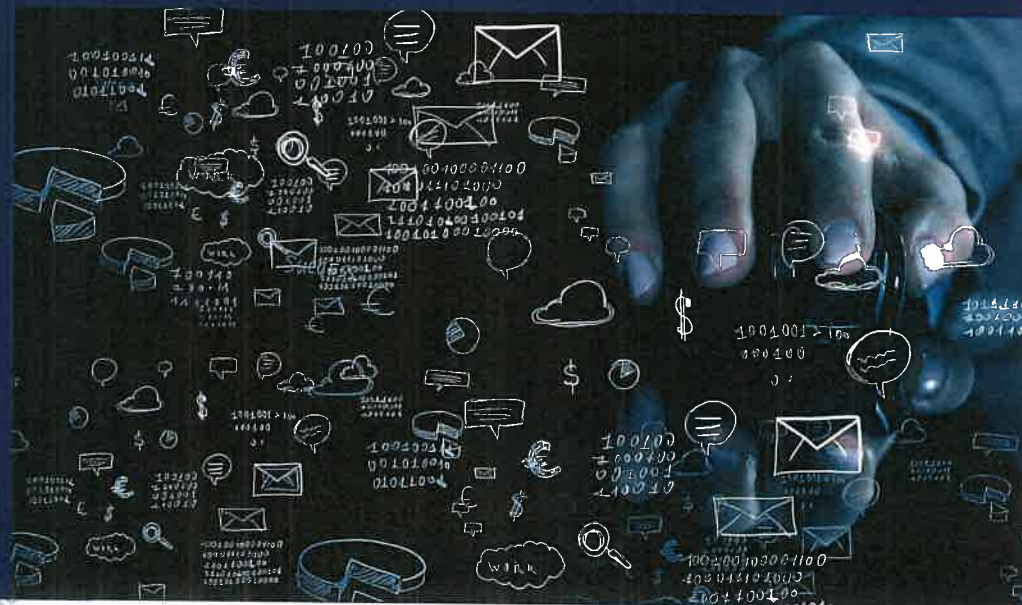


Data structure is a way of organizing and storing data in a computer program so that it can be accessed and used efficiently. Data structures provide a means of managing large amounts of data, enabling efficient searching, sorting, insertion, and deletion of data.

Data structures can be categorized into two types: primitive data structures and non-primitive data structures. Primitive data structures are the most basic data structures available in a programming language, such as integers, floating-point numbers, characters, and Booleans. Non-primitive data structures are complex data structures that are built using primitive data types, such as arrays, linked lists, stacks, queues, trees, graphs, and hash tables.

The choice of data structure for a particular task depends on the type and amount of data to be processed, the operations that need to be performed on the data, and the efficiency requirements of the program. Efficient use of data structures can greatly improve the performance of a program, making it faster and more memory-efficient.



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# Data Structures and Algorithms Using C

First Edition



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