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Data Structure

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Notes

Introduction: What is Data Structure?

Data consist of individual values or groups of values. A data item is a single unit within these values.

A data structure can be defined as a specific way of organizing, storing, and managing data so that it can be used effectively. It provides an architecture to arrange data logically or mathematically for easy access and modification.

Example: An example can be Array which is a collection of elements usually of the same data type that are arranged in a particular order. As here is an array of integers, array = [1, 2, 3, 4, 5].

Some types of Data Structure

Array:

Linked List:

Stack:

Queue:

Tree:

Graph:

Heap Tables: