

# DATA STRUCTURES & ALGORITHMS:

- Specialized formats for organizing, storing, and accessing data in a computer's memory. Programming entities like variables, strings, array, stacks, queue, linked lists, trees and graphs are data structures.

Eg: Think of them like filing cabinets for your computer. Different filing structures work better for different things.

- Textual representation of flow of logic is known as algorithm (Before operation on data structure the logic we use). They act like recipes for your computer, telling it exactly what to do with the data in the chosen data structure.

Note: Implementation is the logic that is put into code by using a programming language.

## Various operations on Data structures:

- Transversing – Accessing the element of particular data structure.
- Searching – Searching the particular element of an array.
- Inserting – Inserting a new element in an array.
- Deleting – Deleting an element from an array.
- Sorting – Arranging elements of an array in ascending or descending order.