

# Data Structures And Algorithms

## Combination of Data Structures and Algorithms

Data Structures: It is defined as data organisation, management, and storage in our devices to use the data efficiently and effectively.

Data Structures include:

1. Linked list
2. Matrix
3. Array
4. Stack
5. Queue
6. Heap
7. Hash
8. Graph
9. Tree
10. String

Algorithm: An algorithm is a finite sequence of well-defined instructions typically used to solve a particular group of problems or to perform a specific type of calculation.

Algorithms include :

- 1.Divide and conquer
- 2.Searching
- 3.Sorting
- 4.Pattern searching
- 5.Greedy
- 6.Recursion
- 7.Backtracking
- 8.Dynamic Programming

What do we cover?

1. Complexity
2. Data Structures
3. Algorithms