

DSA

- data structures and algorithms

↳ data

↳ storage

↳ easily accessible

↳ easily updatable

}

DAA

- design and analysis of algorithms

Topics we will cover in this course:

① Basic definition

② Asymptotic analysis

③ C++ Basics

④ Data structures

↳ Arrays

↳ Linked list

↳ Sparse matrix

↳ Stack

↳ Queue

↳ Tree

↳ Graphs

↳ Hashing

⑤ Algorithms

↳ Linear search

↳ Binary search

↳ Bubble sort

↳ Insertion sort

↳ Selection sort

↳ Quick sort

↳ Merge sort

↳ Heap sort

⑥ Algorithmic paradigms

↳ Brute force

↳ Divide and conquer

↳ Backtracking

↳ Dynamic programming

⑦ DAA

↳ Time complexity

↳ Space complexity

↳ Recurrence

↳ Master's theorem

Who should follow this course

① Computer science enthusiast

② BSc, BTech, MTech, MSc, BCA, MCA