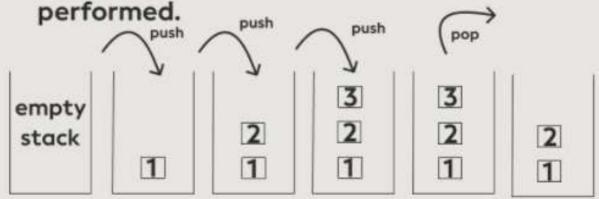
DATA STRUCTURES

ARRAY: An Array is a collection of variables of the same type

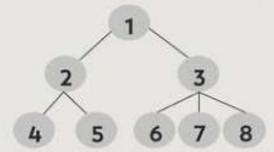
LINKED LIST: In Linked List the elements are not stored at contigous memory location. The element in a Linked List are linked using pointer as shown.

Head
$$\longrightarrow$$
 A \longrightarrow B \longrightarrow C \longrightarrow NULL

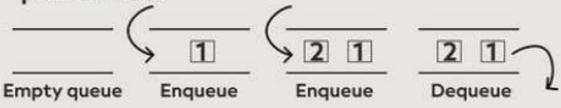
STACK: Stack follows particular order called LIFO (last in first out) in which the operations are



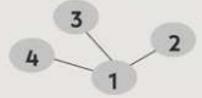
TREE: A Tree is a no linear hierarchical data structure that consist of nodes connected by edge.



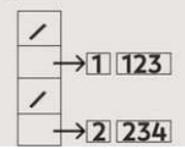
QUEUE: Queue follows a particular order called FIFO (first in first out) in which the operations are performed.



GRAPH: A graph is a collection of nodes that have data and are connected to other nodes.



HASH TABLE : Hash table represents data in form of key value in hash table used for indexing data/values



TOP 25 ALGORITHM

SEARCHING

- 1) Linear Search.
- 2) Binary Search.
- 3) Depth first Search.
- 4) Breadth First Search.

SORTING

- 1) Insertion Sort.
- 2) Heap Sort.
- 3) Selection Sort
- 4) Merge Sort.
- 5) Quick Sort.
- 6) Counting Sort.

GRAPHS

- 1) Kruska's Algo
- 2) Dijkstra's Algo.
- 3) Bellman Ford Algo.
- 4) Floyd Warshall Algo.
- 5) Topological Sort Algo
- 6) Flood Fill Algo
- 7) Lee Algo

ARRAYS

- 1) Kadane's Algo.
- Floyd's Cycle Detection Algo.
- 3) KMP Algo.
- 4) Quick Select Algo.
- Boyer More Majority Vote Algo.

BASIC ALGO'S

- 1) Huffman Coding
- Compression Algo.
- 2 Euclids Algo.
- 3) Union Find Algo