Encapsulation → var → private
method : public

PAGE NO :
DATE : / /

☆ Data structure Abstract :→ limited data to show what happens back is hidden

① Primitive DS → int, float, char, bool, pointer
- Hold single value.

② Non Primitive DS :→
• Linear DS • Non-linear DS.

- Linear DS : sequential manner
array, linkedlist, stack, queue.

- Non linear DS :- one element connected to n elem.
- tree, graph

③ Static DS - size fix, before element is inputed
Dynamic DS - size is var.

④ Stack is abstract data type :- combo implemented by array & linkedlist.

⑤ Algorithm : ① Brute force ② Divide & conquer
③ Backtracking ④ Dynamic programming
⑤ Greedy algo

⑥ In Binary search, every is sorted.

⑦ Stack :→ ① Array ② Linkedlist
① Push ② Pop ③ Peek

⑧ Queue :→ ① Linear queue ② Circular queue
③ Priority queue ④ Deque
↳ insert & delete at both end.

① Enqueue : ② Deque ③ Peek

⑨ Linked list :- ① Singly ② Double ③ Circular

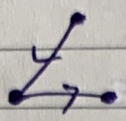
⑩ Tree :- Degree :→ No. of child node.
Root node is level 0.

DATE : / /

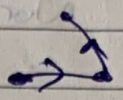
☆ Binary Tree :-

① At most two child.

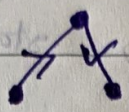
Pre order →

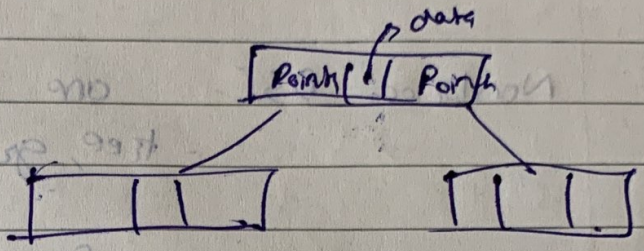


Post Order :-



Inorder :-





• BST :→ RootNode

↙ ↘

allnode AllNode > RootNode.

≤ RootNode

☆ BFS :→ Queue is used.

DFS :→ Stack is used.

Backtracking is done in it.