DSA Module 1-3 questions

Type-1: Differentiate:

* Linear and non linear datastructure
* Stacks and queues
* Linked list and array
* Singly linked list and doubly linked list

Type-2: Short note on:

* Divide and conquer, greedy, backtracking algorithms.
* Growth of functions.
* Mathematical analysis of recurrences.(not for IA)
* Application of stack-well-formness of parenthesis, recursion and reversal of string.
* Queue-types of queue
* Application of queue
* Circular linked list(imp)(note + traversal logic)

Type-3: Problem solving:

* Linked list: polynomial representation and addition. (asked as: applications of linked list+ solve this equation)
* Infix to postfix (5m for algo + 5m for solving problem)

Type-4: Explain in brief:

* Singly linked list
* Doubly linked list
* What is stack, algorithms, logic for stack?
* What is queue, algorithms, logic for queue?