

LinkedList : is a collection of specially designed element called as nodes.

Node is divided into minimum 2 parts

1. Data
2. Address of another element

(node)

Types of LinkedList:

1. Singly Linear LinkedList
2. Singly Circular LinkedList
3. Doubly Linear LinkedList
4. Doubly Circular LinkedList

Advantages :

1. We can shrink and grow at runtime
2. Optimized usage of memory

Disadvantages:

1. Traversal/access to element in linked list cumbersome.
2. As every node keeps address of another element memory given for a pointer against each node is overhead.

Operations:

1. addatfirst, addatlast, addatgivenpos

2. delfromfirst

delfromlast, delfrompos

3. traverse

4. reverse

5. merge

6. sort

etc.