LINKED LIST

Linked lists can be measured as a form of high-level standpoint as being a series of nodes where each node has at least one single pointer to the next connected node, and in the case of the last node, a null pointer is used for representing that there will be no further nodes in the linked list.

Linked list characteristics are as follow:

* Insertion is O(1)
* Deletion is O(n)
* Searching is O(n)

Type of linked list

## A Singly-Linked List

A singly-linked list that holds a sequence of linked nodes. Each node, in turn, contains data and a pointer, which can point to another node.

Node

* Data
* Next

#### Singly List

* Add(value)
* searchNode(position)
* remove(position)

**A doubly –Linked list**

A doubly-linked list takes all the functionality of a singly-linked list and extends it for bi-directional movement in a list.

Operation on doubly linked list

Node

* data
* next
* previous

doubly-linked list

* Retrieve
* \_length
* Tail
* Add(value)
* searchNode(position)
* remove(position)