

What is a Linked List?

A linked list is a linear data structure that consists of a series of nodes connected by pointers. Each node contains data and a reference to the next node in the list. Unlike arrays, linked lists allow for efficient insertion or removal of elements from any position in the list, as the nodes are not stored contiguously in memory.

Singly Linked List:

A singly linked list is a linear data structure in which the elements are not stored in contiguous memory locations and each element is connected only to its next element using a pointer.

Applications:

1. Browsing history in web browsers:
2. Undo/redo functionality in text editors:

Doubly Linked List:

In contrast to a singly linked list, each node in a doubly linked list has two pointers, one pointing to the previous node and one pointing to the next node in the sequence. This makes it possible to traverse the list in both directions.

Applications:

1. Music player playlist
2. Web browser history list