Linked List

What is a linked list?

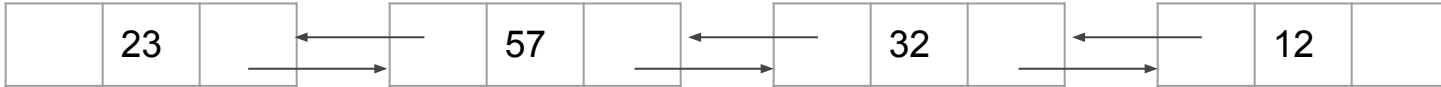| Value	Address

15			9			5			2	
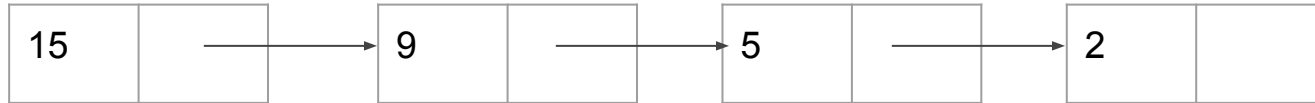
Singly Linked List

Doubly Linked List

Java uses doubly linked list.

Prev	Value	Next

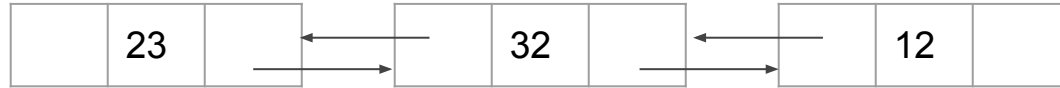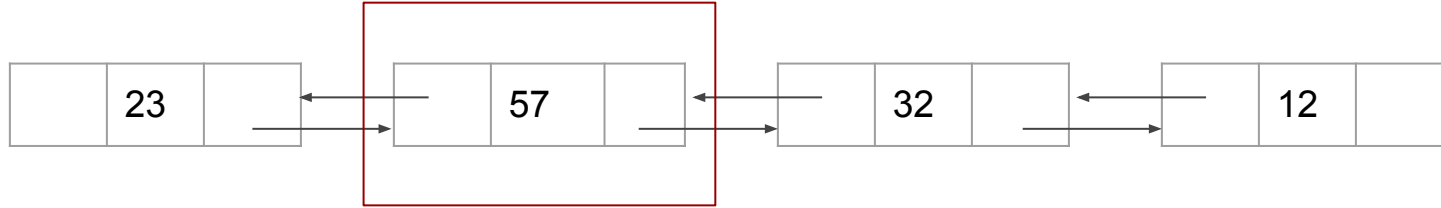| | 23 | | | 57 | | | 32 | | | 12 | |

Linked List Features

Can contain duplicate elements.

Maintains insertion order.

Fast manipulation.

Manipulation in Linked List

Creating A Linked List

LinkedList a = new LinkedList();

LinkedList<String> b = new LinkedList<String>();

ArrayList v/s LinkedList

ArrayList	LinkedList
Uses array to store elements	Uses doubly linked list to store elements
Can act as a list	Can act as a list and queue both
Slow manipulation because of shifting	Faster manipulation as no shifting required
Suitable for storing and accessing elements	Suitable for manipulating elements