## **East West University Department of Computer Science and Engineering**

CSE207 – Data Structures: LAB 02 Course Instructor: Ms. Tanni Mittra

## **Linked List**

• Linked List is a sequence of links which contains items. Each link contains a connection to another link. Linked list is the second most-used data structure after array.



• Create a List ADT with the following operations.

Operation	Description
1. void add(int item)	add item to the end of the List
2. void addbegin(int item)	Add item at the beginning of the list
3. void addanypos(int pos, int item)	Add item at position pos in the List, moving the items originally in positions pos.
4. bool contains(int item)	return true iff item is in the List
5. int size()	return the number of items in the List
6. bool isEmpty()	return true iff the List is empty
7. int get(int pos)	return the item at position pos in the List (error if pos is less than 0 or greater than or equal to size())
8. int indexOf(int item)	Return position of the specified element in the list
9. void removefirst()	Remove first element of the list
10. void removelast()	Remove last element of the list
11. void remove(int pos)	remove and return the item at position pos in the List
12. void reverse()	Reverse the element of the list
13. void sort()	Sort the element of the list in ascending order