

## Assignment 1

Consider a list which is defined using only the head pointer which points to the first node in the list.

Write a program which represents this list using classes. the List class contains the following member functions:

1. **A constructor** : initialize head to Null.
2. **A destructor** : delete all nodes from the list
3. **isEmpty**: determine whether or not the list is empty.
4. **addToHead**: insert a new node at the front of the list.
5. **addToTail**: insert a new node at the end of the list.
6. **findNode**: find a node with a given value and return its number.
7. **deleteFromHead**: delete the first node from the list and return its info if exists.
8. **deleteFromTail**: delete the last node from the list and return its info if exists.
9. **printList**: print all the nodes in the list.
10. **countList**: print the number of nodes in the list.
11. **getMinimum()**: return the minimum item in the list.
12. **sumOdd()**: return the sum of all odd number nodes.
13. **copyList()**: copy all nodes of one list to another.