

Data Structures- 2077

Lab Plan – 3

Exercise-1:

Following is the declaration of *Node* class and its member functions. Write the complete definitions of these member functions.

```
//Node class
class Node{
private:
    int Data;
    Node* Next;
public:
    int GetData();
    Node* GetNext();
    void SetData(int);
    void SetNext(Node*);
};
```

Exercise-2:

Following is the declaration of *List* class and its member functions. Write the complete definitions of these member functions.

```
class List {
private:
    Node *CurrentLocation;
public:
    List();
    void Print();
    void Insert(int);
    void Delete(int);
    void addbetween(int);
};
```

Exercise-3:

Test the code in the main() function by creating Object/s of List class.

Exercise-4:

Implement the following functions on single link list

- a. Finding Minimum
- b. Finding Maximum
- c. Searching
- d. Inserting Item at desired location (take location from user)
- e. Swapping two elements in the linked list
- f. Inserting an element in sorted list
- g. Sorting the list