

Implement a MyList class, a linked list using the following guidelines:

- I. An object of this MyList class will be associated with a head of a list (of type Node) and an integer variable records the size of the list.

Node class is given as follows:

```
public class Node {
    public int data;
    public Node next;
    /** Creates a new node with a null next field
        @param dataItem The data stored
    */
    public Node(int dataItem) {
        data = dataItem;
        next = null;
    }
    /** Creates a new node that references another node
        @param dataItem The data stored
        @param nodeRef The node referenced by new node
    */
    private Node(int dataItem, Node nodeRef) {
        data = dataItem;
        next = nodeRef;
    }
}
```

- II. Implement the following methods for MyList class.

- a) int front()
method that returns the data portion of the first node in the list
- b) int size()
method that returns size of the list
- c) void insert_head(int insert_me)
method that inserts insert_me as first item in the list
- d) void delete_head()
method that removes the first node from the list
- e) void display()

method that prints out the data in the list

In your main program, declare an object of MyList and test the methods you have implemented.

Material to be submitted:

Submit your source files into the dropbox on the course website.