

CSCI 151 - PRELAB №4

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- 1 Assuming you have a zero-argument constructor for Node, write the constructor for the entire MyLinkedList class such that you end up with the above diagram.**

```
public MyLinkedList(){
    head = new Node();
    tail = new Node();
    head.next = tail;
    tail.prev = head;
    size = 0;
}
```

- 2 Write the method body for the getNth method.**

```
private Node getNth(int index){
    Node x = head;
    for (int i=0; i<index; i++){
        x = x.next;}
    return x;
}
```

- 3 Fill in the following methods listed in this anonymous class: (For the prelab you may ignore throwing exceptions for going too far.)**

```
return new ListIterator<T>(){
    ListIterator<T>();
    return this;}

    public boolean hasNext(){
        return ListIterator.hasNext();
    }

    public T next(){
        if (ListIterator.hasNext()) return ListIterator.next();
    }
```

```
}  
public boolean hasPrevious(){  
    if (currentNode==Null) return false;  
}  
public T previous(){  
    if (hasPrevious){  
        previous = currentNode  
        currentNode=current.prev  
        return currentNode  
    }  
}  
}
```