

## Practice Exercise #25: List Reversal

[http://www.comp.nus.edu.sg/~cs1020/4\\_misc/practice.html](http://www.comp.nus.edu.sg/~cs1020/4_misc/practice.html)

### Objective:

- Programming on linked list

### Task Statement

Very often, we asked students to write short code snippets or trace code fragments on linked list in the test or examination. This simple exercise is mainly to write a list reversal method on a linked list.

Most of the code are already given in the skeleton programs. To keep it simple, we implement **MyLinkedList** class as a standalone class instead of it being an implementation of an interface as shown in lecture. Also, to keep the number of files small, we provide two skeleton programs: **MyLinkedList.java** contains the definition of both **ListNode** and **MyLinkedList** classes, and **TestList.java** contains the client program.

You are not to modify **TestList.java** (and hence you do not need to submit it). You are to complete the **toString()** and **reverse()** methods in **MyLinkedList** class. You are not to modify the rest of the given code in **MyLinkedList**. You need to submit only **MyLinkedList.java**.

### Sample runs:

Inputs are shown in blue.

5  
Bobby  
Lucky  
Snoopy  
Snowy  
Mountain

Original list:

[Mountain, Snowy, Snoopy, Lucky, Bobby]

After reversal:

[Bobby, Lucky, Snoopy, Snowy, Mountain]

1  
Babablacksheep

Original list:

[Babablacksheep]

After reversal:

[Babablacksheep]