In this week, we have covered the topics such as **Singly Linked List**, **Doubly Linked List**, **Singly Linked Circular List** and **Doubly Linked Circular List**. These data structures are important for solving many real-world problems. Look the lecture slides for graphical representation of these data structures and pseudocode for various operations (e.g. insertion, deletion and traversing) on these data structures.

For this assignment, you have been provided with a starter code which implements the skeleton of the **Singly Linked List** and **Doubly Linked List** (`MyDoublyLinkedList.cs`). You need to add your code wherever it is asked to do so. This also enables you to develop the programming skills such as understanding and modifying the program codes written by other programmers.

Exercises

EX1:
Complete the provided singly linked list program code (`MySinglyLinkedList.cs`). You need to complete the methods by adding your code. Look for the comments "Add your code here".

EX2:
Do the same for doubly linked list program code (`MyDoublyLinkedList.cs`).

EX3 (Optional):
Write a program that will convert the `student_data` structure in the Example 1 in Portfolio 3 into the `MySinglyLinkedList` class in EX1. Update the method `InsertNode` to insert a `student_data` and similarly update the `DeleteNextNode` method to delete a node holding a student record. This particular node (`student_data`) that need to be deleted can be found by searching student's name. Similarly, amend the `TraverseList` method to print all student data like in `printAllStudent` method in Example 1 (Portfolio 3).