Exercise02 # Doubly-Linked List (8 marks)

Part A: Setting up Java and necessary files

Make sure you have Java and Eclipse ready. Download Eclipse from eclipse.org if necessary.

Part B: The problem defined

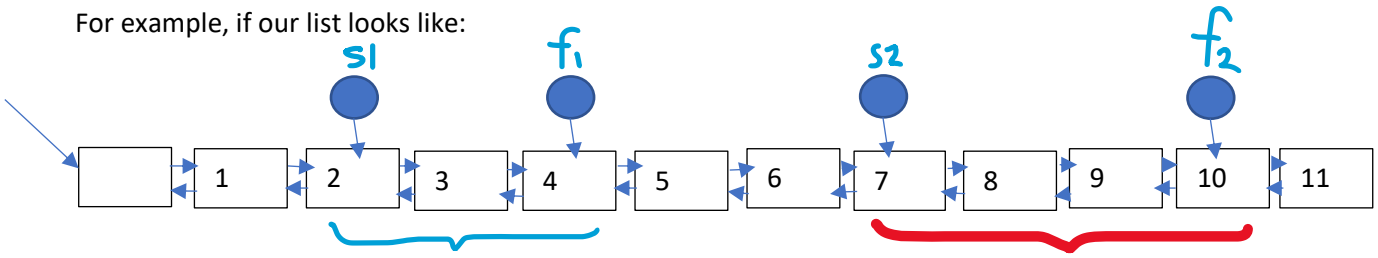
- Code and JUnit test file (1 mark for each case) for this exercise are provided with this document.
- For how to run JUnit in detail, ask your lecturer or see youtube tutorials.

Implement the following method into class CDLinkedList.

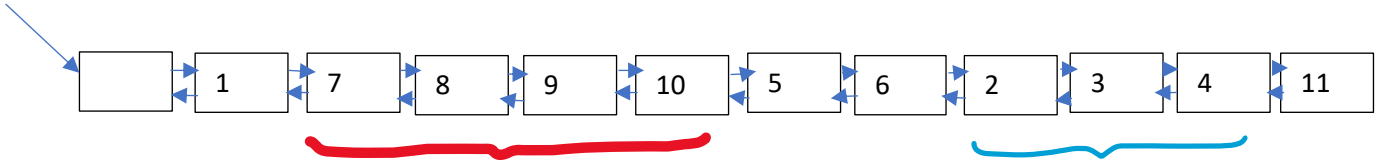
```
public void swapRange(Iterator s1, Iterator f1, Iterator s2, Iterator f2)
```

This method swaps data in range s1 to f1 with range s2 to f2.

For example, if our list looks like:



Then `swapRange(s1, f1, s2, f2)` will result in the following change:



Assumption about the input:

- The list has at least 2 data.
- The range s1 to f1 has at least 1 data.
- The range s2 to f2 has at least 1 data.
- The range s1 to f1 is always to the left of the range s2 to f2. Position f1 is always to the left of s2 (they cannot be the same position, but they can be adjacent).

Requirements (if you do not follow these requirements, you get 0 mark):

- Do not change the JUnit file.
- The list can only be modified by changing pointers.
- You are not allowed to create any new list node.
- You are not allowed to create any new linked list, array, or any other data structures.

How to submit

- Submit your modified CDLinkedList file on MyCourseville (as an attachment to this assignment).
- JUnit Test cases used when marking will be different from the JUnit you have, but they test the same logic. So make sure your program works for any possible inputs.