- Don't forget to set your Eclipse workspace and working set.
- You must submit the JAR file, exported (with source code), from your Eclipse project.
- You must check your JAR file to make sure all the source files (.java files) are present. It can be opened with file compression programs such as 7-zip or Winrar.
- Failure to export properly will result in your work not getting marked.
  - 1) To submit:
    - Export your project to a JAR file, with source code.
    - Name your JAR file ID\_Week04\_Q2.jar. For example, 6623110021\_Week04\_Q2.jar
    - Submit the JAR file on MyCourseville.

## Linked List Q2

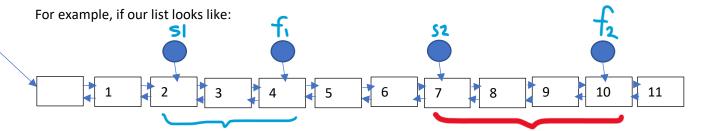
## Doubly-Linked List Pointers (8 marks)

• Code and JUnit test file (1 mark for each case) for this exercise are provided.

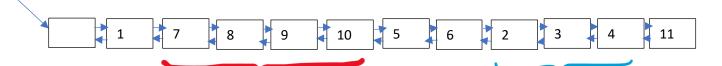
Implement the following method into class **CDLinkedList**.

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.



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. Loop and recursion are not allowed.
- 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.

Total score is 8 marks, each JUnit has 1 mark.