King Saud University
College of Computer and Information Sciences
Computer Science Department

CSC 212 **First Semester 1437-1438**

Tutorial #5

Important: This tutorial has an online part, which you should complete on LMS (tutorial section). The deadline for online task is Sunday October 23 at 8:00 A.M

Problem 1

Write the method ***isPalindrome*** part of the Double linkedList ADT. It should return true if the list is a palindrome. False otherwise. A palindrome is a word, phrase or anything that reads the same forward or reversed.
Examples:
l(13, 54, 76, 54, 13) → true
l("A", "Bus", "Bus", "A") → true
l(300, 400, 500) → false
Method: *public boolean isPalindrome()*

Problem 2

Write an efficient static method ***split*** that splits a queue of n elements into two queues. The elements with odd orders (i.e. 1st, 3rd, 5th …) should be put in the first queue and elements with even orders (i.e. 2nd, 4th, 6th …) should be put in the second queue.
q should remain unchanged at the end of the method.
Example: q (18, 28, 53, 67, 32, 15, 73, 23, 1) → **q1** (18, 53, 32, 73, 1), **q2** (28, 67, 15, 23)
Method: *public static <T> void split(Queue<T> q, Queue<T> q1, Queue<T> q2)*