**King Saud University**

**College of Computer and Information Sciences Computer Science Department**

**CSC 212 First Semester 1437-1438**

**Tutorial # 7**

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

# Problem 1

1. Write the recursive method **search** member of the class Linkedlist. That searches for an element e and return true if found. False otherwise. **Don’t use auxiliary data structures and don’t call any of the LinkedList methods.**
2. Write the static recursive method **SearchList**. That search for an element e in a List l and return true if found. False otherwise. **Don’t use auxiliary data structures.**

# Problem 2

1. Write the recursive static method **CopyStack**, that takes two Stacks s1 and s2 and copies all the elements in s1 into s2 in the same order. **Don’t use auxiliary data structures. s1 should not change at the end of the method.**
2. Write the recursive static method **SearchStack**, that takes a Stack s and an element e and search for the element e and return true if found. False otherwise. **Don’t use auxiliary data structures. s should not change at the end of the method.**