1. Convert an expression in prefix notation to the equivalent postfix notation. Assume that operands and operators are separated by blanks. To solve the problem, you need to use linked lists. The algorithm will be explained in class.

2. Redo the maze problem from last week but use a linked list instead of an array. We will start by creating a linked list with only one node, the entrance node. We then sequentially go through every node on the list and add all the unvisited neighboring squares of the current node to the list and mark them visited. Once the exit square is added to the list, we have found a solution. If after all the nodes on the list have been processed and the exit square is still at added to the list, then the maze has no solution.

3. Redo the maze problem using a linked list as in problem 2. But, instead of adding all the unvisited squares adjacent to the current node, we'd add only one of them and mark it visited. Repeat this process with the newly marked square until the exit square is added to the list. Should we come upon a node whose neighboring squares are either marked visited or blocked, we'd remove the node from the list and start anew from the previous node in the linked list. The maze has no solution once we remove the entrance node from the list.