COSC 3100 – Data Structures II

Assignment 2
Deadline September 11, 2023

1) Write a function to reverse a 'string' that is passed as an argument. The function could be called as follows, and after the function is called the updated string should be displayed:

```
string s = "ABC";
reverseString(s);
cout << "Reversed string: " << s << endl;   // Displays CBA
```

The method of reversing the string should be a recursive process.

2) Develop a template Linked List class that has the following requirements:

   a) A member function to display the elements of the list in the order they are stored

   b) A member function to take an item as an argument and insert it into the list in **descending order**

   c) A member function to take an item as an argument and delete it from the list

This Linked List class should be used to store 'Stock' objects in descending order based on the **symbol** of the stocks.

Use **recursive** algorithms for inserting and deleting nodes.

Write a 'main' function to use the Linked List and Stock classes to clearly demonstrate that all of the functions work correctly.

Note that a foundation of the Stock class was developed in Assignment 1.

THE DEPARTMENT STANDARDS FOR "STYLE GUIDELINES" SHOULD BE FOLLOWED IN ALL CODE.