Homework 2: Basic String Manipulation

Perform basic input and string manipulation in Java.

Start by allowing the user to input three different strings. Then do the following operations, in order:

1. Print the strings back out.
2. Print the length of the second string.
3. Print the first string concatenated with the second.
4. Print \texttt{true} if the first and second strings are the same, and \texttt{false} otherwise.
5. Print the first index where the character \(c\) appears in the first string (or \(-1\) if it doesn’t).
6. Print out where the third string appears within the second one (or \(-1\) if it doesn’t).
7. Print the second string in ALL CAPITAL LETTERS.
8. Parse the third string as an integer, add it to 10, and print the result. (Please note: this means that if the string holds "123", it should print out 133. But if it doesn’t hold a proper number, it will crash the program and give you an ugly error message. That’s okay—that’s why this one’s last.)

Like in this week’s lab, you need only one \texttt{Scanner} object, since you are only reading from one location. Any more than that, and you run the risk of the \texttt{Scanners} conflicting.

You may need to use the online Java documentation to do some of the items on this list. To find it, do a web search for \texttt{java string}, and click the first link. On this huge page is a big list of every method that is part of the \texttt{String} object. Useful methods for you include \texttt{equals()}, \texttt{indexOf()}, and others. Each method tells you what arguments it needs to do its job, and what it returns. Look through this list carefully; every task in the checklist can be done by one of these methods.

The class should be called \texttt{StringManipulation}, and be held (of course) within the file \texttt{StringManipulation.java}. 